

Permit No. DE0051187 (Final draft for public notice)

**National Pollutant Discharge Elimination System (NPDES)
Individual Permit for Storm Water Discharges from
Small Municipal Separate Storm Sewer Systems and Industrial Activities**

**United States Air Force
Dover Air Force Base
Dover, Delaware**

Authorization to Discharge Under the National Pollutant Discharge Elimination System

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et. seq.), except as provided in Part 1.3 of this permit, the United States Air Force, Dover Air Force Base, located in the area specified in Part 1.1, operating in accordance with a Storm Water Management Plan described in Part III, Section A. 6 and a Storm Water Pollution Prevention Plan described in Part III, Section B. 9, is authorized to discharge pollutants to waters of the United States in accordance with the conditions and requirements set forth herein.

This permit becomes effective on _____

This permit and the authorization to discharge expire at midnight, _____

Signed and issued this __ day of ___, 200__.

Jon Capacasa, Director
Water Protection Division
U.S. Environmental Protection Agency
Region III

Table of Contents

PART I PERMIT COVERAGE AND LIMITATIONS

1. Coverage Under this Permit
 - A.1 Permit Area
 - 1.2 Eligibility
 - 1.3 Limitations on Coverage
 - 1.4 Obtaining Authorization
2. Effluent Limitations and Monitoring Requirements
 - 2.1 Outfall 003
 - 2.2 Outfall 007
 - 2.4 Screening Characterization Monitoring

PART II STANDARDS CONDITIONS FOR NPDES PERMITS

3. Standard Permit Conditions
 - 3.1 Duty to Comply
 - 3.2 Need to Halt or Reduce Activity not a Defense
 - 3.3 Duty to Mitigate
 - 3.4 Duty to Provide Information.
 - 3.5 Other Information
 - 3.6 Signatory Requirements
 - 3.7 Property Rights
 - 3.8 Proper Operation and Maintenance
 - 3.9 Inspections and Entry
 - 3.10 Permit Actions
 - 3.11 Permit Transfers
 - 3.12 Anticipated Noncompliance
 - 3.13 State/Tribal Environmental Laws
 - 3.14 Severability
 - 3.15 Procedures for Modification or Revocation
 - 3.16 Oil and Hazardous Substance Liability
 - 3.17 Toxic Pollutants
 - 3.18 Reopener Clause for Water Quality Protection
 - 3.19 Duty to Reapply
4. Definitions

Table of Contents

PART III SPECIAL CONDITIONS

Section A – Special Conditions for Small Municipal Separate Storm Sewer Systems

- 5. Small MS4 Discharges to Water Quality Impaired Water Bodies
- 6. Small MS4 Storm Water Management Program Requirements
 - 6.1 Requirements
 - 6.2 Minimum Control Measures
 - 6.3 Reviewing and Updating Storm Water Management Programs
- 7. Small MS4 Monitoring, Record keeping and Reporting
 - 7.1 Program Evaluation/Assessment Monitoring
 - 7.2 Screening Characterization Monitoring
 - 7.3 Record Keeping
 - 7.4 Reporting

Section B – Special Conditions for Storm Water Associated with Industrial Activities

- 8. Industrial Storm Water Discharges to Water Quality Impaired Water Bodies
- 9.0 Facilities Eligible for “No Exposure” Exemption
- 10.0 Sector Specific Requirements: Scrap Recycling and Waste Recycling Facilities
- 11.0 Sector Specific Requirements: Air Transportation
- 12. Industrial Storm Water Pollution Prevention Plans
 - 12.1 Requirements
 - 12.2 Maintenance
 - 12.3 Applicable State, Tribal or Local Program
 - 12.4 Comprehensive Site Compliance Evaluation
 - 12.5 Maintaining and Updating Storm Water Pollution Prevention Plans
 - 12.6 Signature, Plan Review, and Making Plans Available
- 13. Storm Water Associated with Industrial Activities Monitoring, Record keeping and Reporting
 - 13.1 Monitoring
 - 13.2 Record keeping
 - 13.3 Reporting Monitoring Results
- 14. BOD Reduction Plan
- 15. Airplane and Runway Deicing Product Reduction Plan

Appendix A General Schedule of Deliverables

PART I PERMIT COVERAGE AND LIMITATIONS

1 Coverage Under this Permit

1.1 Permit Area

This permit covers all areas within the boundary of Dover Air Force Base served by or otherwise contributing to storm water discharges from the small municipal separate storm sewers (MS4s) specified in Section 1.2.1 and from industrial activities, specified in Section 1.2.2, owned or operated by the United States Air Force, Dover Air Force Base, in the State of Delaware.

1.2 Eligibility

1.2.1 **Eligibility for Small MS4 System** This permit authorizes discharges of storm water from the small MS4, as defined in 40 CFR §122.26(b)(16). Small MS4 outfalls at Dover Air Force Base discharge storm water from the residential and light commercial sections of the Base.

1.2.2 **Eligibility for Storm Water Discharges Associated with Industrial Activities.** This permit authorizes discharges of storm water associated with industrial activity as defined in 40 CFR §122.26(b)(14)(i)-(ix) and (xi) from “sectors” described below and that are specifically identified by outfall or discharge location in the Storm Water Pollution Prevention Plan (See Section 9 of this permit) Permit eligibility is limited to discharges from facilities in the “sectors” of industrial activity based on Standard Industrial Classification (SIC) Codes and Industrial Activity codes as follows:

1.2.1.1 Sector N: Scrap Recycling Facilities (SIC code 5093),
(Outfall 003)

1.2.1.2 Sector S: Air Transportation (SIC code 4512-4581), and
(Outfalls 002 through 009)

1.2.3 Discharges Covered.

1.2.3.1 Subject to compliance with the terms and conditions of this permit, you are authorized to discharge:

1.2.3.1.1 *Storm water discharges.* This permit authorizes storm water discharges to waters of the United States from the small MS4 outfalls at Dover Air Force Base, (Outfall 010 through 023) and storm water discharges from industrial activities at Dover Air Force Base, (Outfall 002 through 009), except as excluded in Section 1.3.

1.2.3.1.2 *Non-storm water discharges.* You are authorized to discharge the following non-storm water sources provided that the Permitting Authority has not determined these sources to be substantial contributors of pollutants to your small MS4 or to waters of the United States (See also Section 1.3.1 for additional permissible discharges):

- Potable water including water line flushing
- Landscape and lawn watering provided all pesticides, herbicides, and fertilizers have been applied in accordance with manufacturer’s instructions
- Irrigation water
- Diverted stream flows
- Uncontaminated rising ground waters or springs
- Uncontaminated ground water infiltration (infiltration is defined as water other than wastewater that enters a sewer system, including sewer service connections and foundation drains, from the

ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow.)

- Uncontaminated pumped ground water
- Foundation or footing drains where flows are not contaminated with process materials such as solvents
- Uncontaminated air conditioning or compressor condensate
- Water from crawl space pumps
- Individual residential car washing
- Flows from riparian habitats and wetlands
- Dechlorinated swimming pool discharges
- Street wash water where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled materials have been removed)
- Routine external building wash down which does not contain detergents
- Discharges or flows from fire fighting activities and fire hydrant flushing

1.3 Limitations on Coverage

This permit does not authorize:

- 1.3.1 Discharges that are mixed with sources of non-storm water unless such non-storm water discharges are:
 - In compliance with a separate National Discharge Elimination System (NPDES) permit, or
 - Determined not to be a substantial contributor of pollutants to waters of the U.S. (See 1.2.3.1.2)
- 1.3.2 Storm water discharges associated with construction activity as defined in 40 CFR §122.26(b)(14)(x) or 40 CFR §122.26(b)(15). These discharges will be covered under the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges From Construction Activities.
- 1.3.3 Storm water discharges currently covered under another permit.
- 1.3.4 Discharges or discharge-related activities that are likely to jeopardize the continued existence of any species that are listed as endangered or threatened under the Endangered Species Act (ESA) or result in the adverse modification or destruction of habitat that is designated as critical under the ESA.
- 1.3.5 Discharges and discharge-related activities which are likely to have an adverse effect on a property that is listed or is eligible for listing on the National Register of Historic Places as maintained by the Secretary of the Interior; in compliance with the National Historic Preservation Act. Exceptions to this limitation on coverage may be made if the permittee has obtained and is in compliance with a written agreement with the state Historic Preservation Officer (SHPO) or tribal Historic Preservation Officer (THPO) that outlines all measures you will undertake to mitigate or prevent adverse effect to the historic property
- 1.3.6 Discharges to territorial seas, the contiguous zone, and the oceans unless such discharges are in compliance with the ocean discharge criteria of 40 CFR Part 125, Subpart M.
- 1.3.7 Discharges that would cause or contribute to instream exceedances of water quality standards. Your Storm Water Management Program and Storm Water Pollution Prevention Plan must include a description of the BMPs that you will be using to ensure that this will not occur. EPA may require corrective action if an MS4 or storm water associated with industrial activity is determined to cause an instream exceedance of water quality standards.

- 1.3.8 Discharges of any pollutant into any water for which a Total Maximum Daily Load (TMDL) has been either established or approved by the EPA unless your discharge is consistent with the Waste Load Allocations (WLAs) contained in that TMDL or allotted to the permittee. If conditions change after you have permit coverage, you may remain covered by the permit provided you comply with the applicable requirements of Part III, Sections 5 and 8. You must incorporate any limitations, conditions and requirements applicable to your discharges, including monitoring frequency and reporting required, into your Storm Water Management Program and Storm Water Pollution Prevention Plan in order to be eligible for permit coverage.
- 1.3.9 Discharges that do not comply with your state or tribe's anti-degradation policy for water quality standards. State and tribal anti-degradation policies can be obtained from the appropriate state or tribal environmental office or their Internet sites.

2.0 Effluent Limitations and Monitoring Requirements

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS:

BENCHMARK MONITORING FOR INDUSTRIAL STORM WATER DISCHARGES

(Refer to Benchmark Monitoring discussion in Section 13.1.1.2 of this permit)

During the period beginning with the issuance date of this permit and lasting through the expiration date, the permittee is authorized to discharge storm water associated with industrial activity only from outfall serial numbers 002, 003, 004, 005, 006, 007, 008, 009. Discharge parameters to be sampled were selected based on common parameters found in storm water discharges associated with each of the industrial activities, as described in the United States Environmental Protection Agency NPDES Storm Water Multi-Sector General Permit for Industrial Activities.

Dover Air Force Base established Outfall 003 as the representative outfall from which sampling will be conducted for Storm Water Associated with Air Transportation Activities and Scrap and Waste Recycling Activities. Sampling from Outfall 003 shall be conducted in accordance with the following table and Section 13 of this permit.

2.1 Outfall 003 ⁽¹⁾

Storm Water Discharge Associated with Air Transportation and Scrap Recycling and Waste Recycling Facilities

<u>Discharge Parameter</u>	<u>Discharge Limitation</u> ⁽¹⁾		<u>Monitoring Requirements</u>	
	(kg/day) lb/day Avg. Monthly Daily Max.	Other units (mg/l) ⁽²⁾ Monthly Avg. Daily Max.	Measurement ⁽³⁾ Frequency	Sample type
Flow	N/A	Monitor & Report	quarterly, 1/month	Est.
Total Suspended Solids	N/A	Monitor & Report	quarterly, 1/month	grab
Biochemical Oxygen Demand (BOD ₅)	N/A	Monitor & Report	quarterly, 1/month	grab
Chemical Oxygen Demand (COD)	N/A	Monitor & Report	quarterly, 1/month	grab
Ammonia	N/A	Monitor & Report	quarterly, 1/month	grab
Propylene Glycol	N/A	Monitor & Report	quarterly, 1/month	grab
Oil and Grease	N/A	Monitor & Report	quarterly, 1/month	grab
Total Recoverable Iron	N/A	Monitor & Report	quarterly	grab
Copper	N/A	Monitor & Report	quarterly	grab
Lead	N/A	Monitor & Report	quarterly	grab
Zinc	N/A	Monitor & Report	quarterly	grab
pH	N/A	Monitor & Report	quarterly, 1/month	grab

- (1) In addition to Outfall 003, Outfalls 002, 004, 005, 006, 007, 008 and 009 discharge storm water from Air Transportation activities. Outfall 003 was selected as the representative outfall for this industrial activity because all Air Transportation activities occur within outfall 003 drainage area and because the total acreage of drainage area for outfall 003 is the largest of the seven outfalls that discharge this type of storm water. Outfall 003 is the only outfall that drains storm water emanating from the Scrap Recycling and Waste Recycling facility.
- (2) Concentration levels of the listed parameters must be reported on DMRs. Benchmark concentrations listed in Table 13.1 of this permit, may be used as a guide to determine the effectiveness of BMPs but are not considered effluent concentration limits.
- (3) Quarterly samples April through October
Monthly samples November through March due to higher precipitation and snow

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS:

BENCHMARK MONITORING FOR INDUSTRIAL STORM WATER DISCHARGES

(Refer to Benchmark Monitoring discussion in Section 13.1.1.2 of this permit)

2.2 Outfall 007

Storm Water Discharge Associated with Air Transportation (includes storm water drainage form golf course)

<u>Discharge Parameter</u>	<u>Discharge Limitation</u>		<u>Monitoring Requirements</u>	
	(kg/day) lb/day Avg. Monthly Daily Max.	Other units (mg/l) ⁽¹⁾ Monthly Avg. Daily Max.	Measurement ⁽²⁾ Frequency	Sample type
Flow	N/A	Monitor & Report	quarterly	Est.
Total Suspended Solids	N/A	Monitor & Report	quarterly	grab
Biochemical Oxygen Demand (BOD ₅)	N/A	Monitor & Report	quarterly, 1/month	grab
Chemical Oxygen Demand (COD)	N/A	Monitor & Report	quarterly, 1/month	grab
Ammonia	N/A	Monitor & Report	quarterly, 1/month	grab
Propylene Glycol	N/A	Monitor & Report	quarterly, 1/month	grab
Oil and Grease	N/A	Monitor & Report	quarterly, 1/month	grab
pH	N/A	Monitor & Report	quarterly, 1/month	grab

(1) Concentration levels of the listed parameters must be reported on DMRs. Benchmark concentrations listed in Table 13.1 of this permit, may be used as a guide to determine the effectiveness of BMPs but are not considered effluent concentration limits.

(2) Quarterly samples mean no fewer than 4 sampled rain events per calendar year.

2.4 EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS:

SCREENING CHARACTERIZATION MONITORING FOR MS4 AND INDUSTRIAL STORM WATER DISCHARGES

(Refer to Screening Characterization Monitoring discussion in Sections 7.2 and 13.1.1.3)

During the period beginning with the issuance date of this permit and lasting through the first two years after the development of a Screening Characterization Monitoring Plan, the permittee is required to conduct screening characterization monitoring of storm water discharges from representative storm water outfalls from their MS4 and from their industrial sectors as described in Sections 7.2 and 13.1.3 respectively. Parameters were selected based on common parameters found in storm water emanating from MS4s and industrial activities and base on parameters included in Delaware's 303(d) list of impaired waters for Saint Jones and Pipe Elm Branch. Three representative outfalls may be selected from outfalls 010 through 023 for the MS4 screening characterization monitoring and two representative outfalls may be selected from outfalls 002 through 009 for the industrial areas of the Base.

Parameters sampled from representative outfalls from MS4 (outfalls 010 – 023):

Bacteria (Fecal coliform)

Nutrients (total phosphorous and total nitrogen)

Metals (total copper, lead zinc, cadmium)

Total Suspended Solids (TSS)

Biological Oxygen Demand (BOD5)

Oil and grease

pH

Detergents or surfactants

Parameters sampled from representative outfalls from Industrial Activities (outfalls 002 – 009):

Flow

Oil and grease

PH

BOD5

COD

TSS

total phosphorous

total Kjeldahl nitrogen

nitrate + nitrite nitrogen

PART II STANDARD PERMIT CONDITIONS

3 Standard Permit Conditions

3.1 Duty to Comply

3.1.1 You must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of CWA and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

3.1.2 *Penalties for Violations of Permit Conditions.*

The Permitting Authority will adjust the civil and administrative penalties listed below in accordance with the Civil Monetary Penalty Inflation Adjustment Rule (Federal Register: December 31, 1996, Volume 61, Number 252, pages 69359-69366, as corrected, March 20, 1997, Volume 62, Number 54, pages 13514-13517) as mandated by the Debt Collection Improvement Act of 1996 for inflation on a periodic basis. This rule allows EPA's penalties to keep pace with inflation. The Agency is required to review its penalties at least once every four years thereafter and to adjust them as necessary for inflation according to a specified formula. The civil and administrative penalties listed below were adjusted for inflation starting in 1996.

3.1.2.1 *Criminal Violations.*

3.1.2.1.1 *Negligent Violations.* The CWA provides that any person who *negligently* violates permit conditions implementing section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402, is subject to a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than 1 year, or both. In the case of a second, or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than 2 years, or both.

3.1.2.1.2 *Knowing Violations.* The CWA provides that any person who *knowingly* violates permit conditions implementing section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, is subject to a fine of not less than \$5,000 nor more than \$50,000 per day of violation, or by imprisonment for not more than 3 years, or both. In the case of a second, or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or by imprisonment of not more than 6 years, or both.

3.1.2.1.3 *Knowing Endangerment.* The CWA provides that any person who *knowingly* violates permit conditions implementing section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury shall, upon conviction be subject to a fine not more than \$250,000 or by imprisonment for not more than 15 years, or both. In the case of a second, or subsequent conviction for a knowing endangerment violation, a person shall be subject to criminal penalties of not more than \$500,000 per day of violation, or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA shall, upon conviction of violating the imminent danger

provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions.

3.1.2.1.4 *False Statement.* The CWA provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the Act or who knowingly falsifies, tampers with, or renders inaccurate, any monitoring device or method required to be maintained under the Act, shall upon conviction, be punished by a fine of not more than \$10,000 or by imprisonment for not more than two years, or by both. If a conviction is for a violation committed after a first conviction of such person under this paragraph, punishment shall be by a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four years, or by both. (See section 309(c)(4) of the Clean Water Act).

3.1.2.2 *Civil Penalties.*

The CWA provides that any person who violates a permit condition implementing section 301, 302, 306, 307, 308, 318 or 405 of the Act or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, is subject to a civil penalty not to exceed \$27,500 per day for each violation.

3.1.2.3 *Administrative Penalties.*

The CWA provides that any person who violates a permit condition implementing section 301, 302, 306, 307, 308, 318 or 405 of the Act or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, is subject to an administrative penalty as follows:

3.1.2.3.1 *Class I penalty.* Not to exceed \$11,000 per violation nor shall the maximum amount exceed \$27,500.

3.1.2.3.2 *Class II penalty.* Not to exceed \$11,000 per day for each day during which violation continues nor shall the maximum amount exceed \$137,500.

3.2 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for you in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

3.3 Duty to Mitigate

You must take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

3.4 Duty to Provide Information

You must furnish to the Permitting Authority any information that is requested to determine compliance with this permit or other information.

3.5 Other Information

If you become aware that you have failed to submit any relevant facts in your permit application or submitted incorrect information in the application or in any other report to the Permitting Authority, you must promptly submit such facts or information.

3.6 Signatory Requirements

All permit applications, reports, certifications, or information submitted to the Permitting Authority, or that this permit requires be maintained by you shall be signed and certified as follows:

- 3.6.1 *Permit Application.* All permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes (1) the chief executive officer of the agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Base Commander).
- 3.6.2 *Reports and other information.* All reports required by the permit and other information requested by the Permitting Authority or authorized representative of the Permitting Authority shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
- 3.6.2.1 *Signed authorization.* The authorization is made in writing by a person described above and submitted to the Permitting Authority.
- 3.6.2.2 *Authorization with specified responsibility.* The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of manager, operator, superintendent, or position of equivalent responsibility for environmental matter for the regulated entity.
- 3.6.3 *Changes to authorization.* If an authorization is no longer accurate because a different operator has the responsibility for the overall operation of the MS4 or the specific sectors of industrial activity, a new authorization satisfying the requirement of (3.6.2.2) above must be submitted to the Permitting Authority prior to or together with any reports, information, or applications to be signed by an authorized representative.
- 3.6.4 *Certification.* Any person signing documents under section 3.6 shall make the following certification:
- “I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

3.7 Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations

3.8 Proper Operation and Maintenance

You must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by you to achieve compliance with the conditions of this permit and with the conditions of your Storm Water Management Program in your MS4 areas and your Storm Water Pollution Prevention Plan in your industrial activity areas. Proper

operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by you only when the operation is necessary to achieve compliance with the conditions of the permit.

3.9 Inspection and Entry

You must allow the Permitting Authority or an authorized representative (including an authorized contractor acting as a representative of the Administrator) upon the presentation of credentials and other documents as may be required by law, to do any of the following:

- 3.9.1 Enter your premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;
- 3.9.2 Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit;
- 3.9.3 Inspect at reasonable times any facilities or equipment (including monitoring and control equipment) practices, or operations regulated or required under this permit; and
- 3.9.4 Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the CWA, any substances or parameters at any location.

3.10 Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. Your filing of a request for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

3.11 Permit Transfers

This permit is not transferable to any person except after notice to the Permitting Authority. The Permitting Authority may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Act.

3.12 Anticipated Noncompliance

You must give advance notice to the Permitting Authority of any planned changes in the permitted small MS4 or activity or specific sectors of industrial activity, which may result in noncompliance with this permit.

3.13 State/Tribal Environmental Laws

- 3.13.1 Nothing in this permit shall be construed to preclude the institution of any legal action or relieve you from any responsibilities, liabilities, or penalties established pursuant to any applicable State/Tribal law or regulation under authority preserved by section 510 of the Act.
- 3.13.2 No condition of this permit releases you from any responsibility or requirements under other environmental statutes or regulations.

3.14 Severability

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

3.15 Procedures for Modification or Revocation

Permit modification or revocation will be conducted according to 40 CFR 122.62, 122.63, 122.64 and 124.5.

3.16 Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve you from any responsibilities, liabilities, or penalties to which you are or may be subject under section 311 of the CWA or section 106 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA).

3.17 Toxic Pollutants

The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the CWA for toxic standards within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

3.18 Reopener Clause for Water Quality Protection.

- 3.18.1 *Submission of additional information.* If there is evidence any time after authorization indicating that the storm water discharges authorized by this permit cause, have reasonable potential to cause, or contribute to a violation of a water quality standard, upon written notification from the permitting authority, you may be required to submit one of the following: (1) a supplemental BMP Action Plan describing SWMP or SWPPP modifications to respond to the identified water quality concerns, accompanied by a certification by a third party, professional engineer; (2) an explanation of why your discharge does not cause or contribute to nonattainment of applicable water quality standards; or (3) valid and verifiable data and information that are representative of ambient conditions and indicate that the receiving water is attaining water quality standards.
- 3.18.2 *Reopener Clause.* This permit may be reopened and modified during the life of the permit to address:
- 3.18.2.1 The need for additional controls if, after review of results of full scale monitoring conducted for the purpose of characterizing the storm water discharges from the MS4 and industrial areas as described in Section 10.1.1.3, it is determined that additional controls are necessary to meet the requirements of the Clean Water Act;
- 3.18.2.2 Changes in water quality standards and or changes in Delaware or Federal statutes or Regulations;
- 3.18.2.3 Changes in portions of the Storm Water Management Program for the MS4 system or changes in the Storm Water Pollution Prevention Plan for industrial activities that are considered permit conditions; or
- 3.18.2.4 Other modifications deemed necessary by the Permitting Authority to meet the requirements of the Clean Water Act. All modifications to the permit will be made in accordance with 40 CFR 122.62, 122.63, and 124.5.

3.19 Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after expiration date of this permit, the permittee must apply for and obtain a new permit. The application shall be submitted at least 180 days before the expiration date of this permit. The Permitting Authority may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date. In the event that a timely and complete re-application has been submitted and the Permitting Authority is unable, through no fault of the permittee, to issue a new permit before the expiration date of this permit, the terms and conditions of this permit are automatically continued and remain fully effective and enforceable.

3.19.1 *Submitting a Late Application.* You are not prohibited from submitting an application after the dates provided in Table 13.2. If a late application is submitted, your authorization is only for discharges that occur after permit coverage is granted. The Permitting Authority reserves the right to take appropriate enforcement actions for any unpermitted discharges.

3.19.2 *Contents of the Permit Application* The Application must be signed in accordance with Part 3.6 of this permit and must include the following information:

3.19.2.1 *Information on the Permittee:*

3.19.2.1.1 The name of your Federal agency, name of environmental manager, mailing address, and telephone number;

3.19.2.1.2 A site map which indicates drainage areas served by all outfalls, paved areas and buildings within the drainage areas of each outfall, areas used for outdoor storage of significant materials, existing structural control measures to reduce pollutants in storm water, hazardous waste treatment storage or disposal facilities, and surface water bodies that receive storm water discharges from the facility.

3.19.2.2 *Information on the Municipal Separate Storm Sewer System:*

3.19.2.2.1 The Urbanized Area or Core Municipality where your system is located; the name of the county(ies) where your MS4 is located, and the latitude and longitude of an approximate center of your MS4;

3.19.2.2.2. The name of the major receiving water(s) and an indication of whether any of your receiving waters are on the latest CWA §303(d) list of impaired waters. If you have discharges to 303(d) waters, a certification that your Storm Water Management Program complies with the requirements of Part III sections 5.1 and 8.1;

3.19.2.1.3 If you are relying on another governmental entity regulated under the storm water regulations (40 CFR 122.26 & 122.32) to satisfy one or more of your permit obligations, the identity of that entity(ies) and the element(s) they will be implementing.

3.19.2.1.4 Information on your chosen best management practices (BMPs) and the measurable goals for each of the storm water minimum control measures in Part 6.2 of this permit, your timeframe for implementing each of the BMPs, and the person or persons responsible for implementing or coordinating your Storm Water Management Program.

3.19.2.1.5 Certification of whether you have met eligibility criteria for protection of threatened or endangered species, critical habitat, historic properties, and marine fisheries.

3.19.2.3 *Information on the Storm Water Associated with Industrial Activities:*

3.19.2.3.1 Federal NPDES permit application Form 2F – Application for permit to Discharge Storm Water Associated with Industrial

3.19.2.3.2 Copy of your Storm Water Pollution Prevention Plan developed in accordance with Section 9 of this permit.

3.19.2.4 *Addendums to Application:*

Where the operator changes, or where a new operator is added after submittal of an application, an addendum to the application must be submitted in accordance with Section 3.6.3 prior to the change or addition.

3.19.3.3 Where to Submit

You are to submit your application, signed in accordance with the signatory requirements of Section 3.6 of this permit, to EPA at the following address:

Storm Water Coordinator (3WP13)
USEPA
1650 Arch Street
Philadelphia, PA 19103

4 Definitions

All definition contained in Section 502 of the Act and 40 CFR 122 shall apply to this permit and are incorporated herein by reference. For convenience, simplified explanations of some regulatory/statutory definitions have been provided, but in the even of a conflict, the definition found in the Statute or Regulation takes precedence.

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Contaminated storm water –(as used in the context of Landfill Industrial Sector activities) storm water which comes in direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater as defined in Part 6.K.4.5. Some specific areas of a landfill that may produce contaminated storm water include (but are not limited to): the open face of an active landfill with exposed waste (no cover added); the areas around wastewater treatment operations; trucks, equipment or machinery that has been in direct contact with the waste; and waste dumping areas.

Control Measure as used in this permit, refers to any Best Management Practice or other method used to prevent or reduce the discharge of pollutants to waters of the United States.

CWA or The Act means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub.L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. 96-483 and Pub. L. 97-117, 33 U.S.C. 1251 et.seq.

Discharge, when used without a qualifier, refers to “discharge of a pollutant” as defined at 40 CFR 122.2.

Drained free liquids - aqueous wastes drained from waste containers (e.g., drums, etc.) prior to landfilling.

Facility or Activity, means any NPDES “point source” or any facility or activity (including land appurtenances thereto) that is subject to regulation under the NPDES program.

Illicit Connection means any man-made conveyance connecting an illicit discharge directly to a municipal separate storm sewer.

Illicit Discharge is defined at 40 CFR 122.26(b)(2) and refers to any discharge to a municipal separate storm sewer that is not entirely composed of storm water, except discharges authorised under an NPDES permit (other than the NPDES permit for discharges from the MS4) and discharges resulting from fire fighting activities.

Indian Country, as defined in 18 USC 1151, means (a) all land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation; (b) all dependent Indian communities within the borders of the United States whether within the original or subsequently acquired territory thereof, and whether within or without the limits of a state, and (c) all Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same. This definition includes all land held in trust for an Indian tribe.

Industrial Activity as used in this permit refers to the eleven categories of industrial activities defined in 40 CFR 122.26(b)(14).

Land treatment facility - a facility or part of a facility at which hazardous waste is applied onto or incorporated into the soil surface; such facilities are disposal facilities if the waste will remain after closure.

Landfill - an area of land or an excavation in which wastes are placed for permanent disposal, that is not a land application or land treatment unit, surface impoundment, underground injection well, waste pile, salt dome formation, a salt bed formation, an underground mine or a cave as these terms are defined in 40 CFR 257.2, 258.2 and 260.10.

Low impact development – An innovative technology to control storm water quantity and quality impacts at the source using microscale management practices distributed and integrated throughout the landscape. The technology is ecologically based with the ultimate goal of creating a hydraulically functional site with minimal impacts to receiving waters, low maintenance costs and a more aesthetically pleasing environment. (Examples of low impact development techniques include bioswales, bioretention cells, rain barrels, natural lawn care practices, water conservation, etc)

MEP is an acronym for "Maximum Extent Practicable," the technology-based discharge standard for Municipal Separate Storm Sewer Systems to reduce pollutants in storm water discharges that was established by CWA §402(p). A discussion of MEP as it applies to small MS4s is found at 40 CFR 122.34.

MS4 is an acronym for "Municipal Separate Storm Sewer System" and is used to refer to either a Large, Medium, or Small Municipal Separate Storm Sewer System. The term is used to refer to either the system operated by a single entity or a group of systems within an area that are operated by multiple entities (e.g., the Houston MS4 includes MS4s operated by the city of Houston, the Texas Department of Transportation, the Harris County Flood Control District, Harris County, and others). The MS4 at Dover Air Force Base refers to the separate storm sewer system that collects, conveys and discharges storm water associated with their residential and light commercial (considered "municipal") properties.

Municipal Separate Storm Sewer is defined at 40 CFR 122.26(b)(8) and means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States; (ii) Designed or used for collecting or conveying storm water; (iii) Which is not a combined sewer; and (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2. Phase II of the Storm Water Regulations specifically included Federal Facilities in this definition.

Non-contaminated storm water - storm water which does not come into direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater as defined in Part 6.K.4.5. Non-contaminated storm water includes storm water which flows off the cap, cover, intermediate cover, daily cover, and/or final cover of the landfill.

Permitting Authority means the EPA Regional Administrator or an authorized representative.

Point Source means any discernable, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

Pile - any non-containerized accumulation of solid, nonflowing hazardous waste that is used for treatment or storage and that is not a containment building.

Small Municipal Separate Storm Sewer System is defined at 40 CFR 122.26(b)(16) and refers to all separate storm sewers that are owned or operated by the United States, a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States, but is not defined as “large” or “medium” municipal separate storm sewer system. This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings.

Storm Water is defined at 40 CFR 122.26(b)(13) and means storm water runoff, snow melt runoff, and surface runoff and drainage.

Storm Water Management Program (SWMP) refers to a comprehensive program to manage the quality of storm water discharged from the municipal separate storm sewer system. Also refers to the document created by the Permittee which lays out the program.

Surface impoundment - a facility or part of a facility which is a natural topographic depression, man-made excavation or diked area formed primarily of earthen materials (although it may be lined with man-made materials), which is designed to hold an accumulation of liquid wastes or wastes containing free liquids, and which is not an injection well. Examples of surface impoundments are holding, storage, settling, and aeration pits, ponds and lagoons.

SWMP is an acronym for “Storm Water Management Program.”

Storm Water Pollution Prevention Plan for the purposes of this permit are plans developed by the permittee for storm water associated with industrial activities that contain three general topics of storm water pollution prevention: (1) identification of potential sources of pollution which may reasonably be expected to affect the quality of the storm water discharges from an industrial facility, (2) description and assurance of implementation of practices which the permittee will use to reduce the pollutants in the storm water discharges from their industrial facility. And (3) assurance with compliance with the terms and conditions of the permit.

SWPPP an acronym for “Storm Water Pollution Prevention Plan.”

Waters of the United States means:

1. All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
2. All interstate waters including interstate wetlands;

3. All other waters such as interstate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
 - a. Which are or could be used by interstate or foreign travelers for recreation or other purposes;
 - b. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
 - c. Which are used or could be used for industrial purposes by industries in interstate commerce;
4. All impoundments of waters otherwise defined as waters of the US under this definition;
5. Tributaries of waters identified in paragraphs (1) through (4) of this definition;
6. The territorial sea; and
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (1) through (6) of this definition.

“You” and “Your” as used in this permit is intended to refer to the permittee, the operator, or the discharger as the context indicates and that party’s responsibilities (e.g., the city, the country, the flood control district, the U.S. Air Force, etc.).

PART III SPECIAL CONDITIONS**Section A - Special Conditions for Small Municipal Separate Storm Sewer Systems****5 Small MS4 Discharges to Water Quality Impaired Waters**

- 5.1 *Applicability:* Pipe Elm Branch and Saint Jones River, two Waters of the US that receive storm water discharges from Dover Air Force Base, are listed on the state of Delaware 1998 section 303(d) list of impaired waters. All outfalls from the MS4 at Dover Air Force Base discharge to Saint Jones River. Lower Saint Jones River is listed for the following pollutants of concern: DO, nutrients, and PCBs. Upper Saint Jones River is listed for the following pollutants of concern: bacteria, DO, nutrients, and PCBs. At the time of issuance of this permit, no TMDLs have been developed and approved by EPA for Saint Jones River.
- 5.2 *Water Quality Controls for Discharges to Impaired Waterbodies.* Your Storm Water Management Program (SWMP) must include a section describing how your program will control the discharge of the pollutants of concern and ensure your discharges will not cause or contribute to instream exceedances of the water quality standards. This discussion must specifically identify measures and BMPs that will collectively control the discharge of the pollutants of concern.
- 5.3 *Consistency with Total Maximum Daily Load (TMDL) Allocations.* When a TMDL has been approved by EPA for any waterbody into which you discharge, you must at the next permit reissuance or as an amendment to the current permit, as directed by the Permitting Authority:
- 5.3.1 Determine whether the approved TMDL is for a pollutant likely to be found in storm water discharges from your MS4.
- 5.3.2 Determine whether the TMDL includes a pollutant wasteload allocation (WLA) or other performance requirements specifically for storm water discharge from your MS4.
- 5.3.3 Determine whether the TMDL address a flow regime likely to occur during periods of storm water discharge.
- 5.3.4 After the determinations above have been made and if it is found by the Permitting Authority that your MS4 must implement specific WLA provisions of the TMDL, assess whether the WLAs are being met through implementation of existing storm water control measures or if additional control measures are necessary.
- 5.3.5 Document all control measures currently being implemented or planned to be implemented. Also include a schedule of implementation for all planned controls. Document the calculations or other evidence that shows that the WLA will be met.
- 5.3.6 Describe a monitoring program to determine whether the storm water controls are adequate to meet the WLA.
- 5.3.7 If the evaluation shows that additional or modified controls are necessary, describe the type and schedule for the control additions/revisions. Continue Parts 5.1.3.4-7 until two continuous monitoring cycles show that the WLAs are being met or that WQ standards are being met.

6 Small MS4 Storm Water Management Program Requirements

- 6.1 You must develop, implement, and enforce a Storm Water Management Program within the life of this permit, designed to reduce the discharge of pollutants from your small MS4 to the maximum extent practicable (MEP), to ensure compliance with water quality standards, and to satisfy the appropriate water quality requirements of the Clean Water Act. The storm water management program should include management practices; control techniques and system, design, and engineering methods; and such other provisions as the Permitting Authority determines appropriate for the control of such pollutants.

In accordance with 40 CFR 122.34, the Storm Water Management Program shall be developed and implemented in accordance with the following schedule

Submit written Storm Water Management Program (SWMP)	PID + 12 months
Permitting Authority review and approve SWMP	PID + 13 months
Commence Implementation of Storm Water Management Program	PID + 13 months
Submit Annual Report Based on Implementation of SWMP	PID + 25 months (then annually)
Revise SWMP as per Screening Characterization (if applicable)	PID + 28 months
Note: PID means permit issuance date	

Your storm water management program must include the following information for each of the six minimum control measures described in Section 6.2 of this permit:

- 6.1.1 The best management practices (BMPs) that you or another entity will implement for each of the storm water minimum control measures;
- 6.1.2 The measurable goals for each of the BMPs including, as appropriate, the months and years in which you will undertake required actions, including interim milestones and the frequency of the action; and
- 6.1.3 The person or persons responsible for implementing or coordinating the BMPs for your storm water management program.
- 6.1.4 In addition to the requirements listed above, you must provide a rationale for how and why you selected each of the BMPs and measurable goals for your storm water management program. The information required for such a rationale is given in Section 6.2 for each minimum measure. You must develop and fully implement your program within five (5) years after the issuance date of this permit.

6.2 Small MS4 Minimum Control Measures

The six minimum control measures that must be included in your Storm Water Management Program are:

6.2.1 Public Education and Outreach on Storm Water Impacts

- 6.2.1.1 *Permit requirement.* You must implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff.
- 6.2.1.2 *Implementation process.* You must document your rationale and implementation process for your storm water public education and outreach program. Your rationale statement must address both your overall public education program and the individual BMPs, measurable goals and responsible persons for your program. The rationale statement must include the following information, at a minimum:

- 6.2.1.2.1 How you plan to inform individuals and households about the steps they can take to reduce storm water pollution.
- 6.2.1.2.2 How you plan to inform individuals and groups on how to become involved in the storm water program (with activities such as local stream and beach restoration activities).
- 6.2.1.2.3 Who are the target audiences for your education program who are likely to have significant storm water impacts (including commercial, industrial and institutional entities) and why those target audiences were selected.
- 6.2.1.2.4 What are the target pollutant sources your public education program is designed to address.
- 6.2.1.2.5 What is your outreach strategy, including the mechanisms (e.g., printed brochures, newspapers, media, workshops, etc.) you will use to reach your target audiences , and how many people do you expect to reach by your outreach strategy over the permit term.
- 6.2.1.2.6 Who is responsible for overall management and implementation of your storm water public education and outreach program and, if different, who is responsible for each of the BMPs identified for this program.
- 6.2.1.2.7 How will you evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs.

6.2.2 Public Involvement/Participation

- 6.2.2.1 *Permit requirement.* You must at a minimum, comply with State, Tribal, and local public notice requirements when implementing a public involvement/participation program.
- 6.2.2.2 *Implementation process.* You must document your rationale and implementation process for the storm water public involvement/participation program. Your rationale statement must address both your overall public involvement/participation program and the individual BMPs, measurable goals, and responsible persons for your program. The rational statement must include the following information, at a minimum:
 - 6.2.2.2.1 Your plan to actively involve the public in the development and implementation of your program.
 - 6.2.2.2.2 Who are the target audiences for your public involvement program, including a description of the types of ethnic and economic groups engaged. You are encouraged to actively involve all potentially affected stakeholder groups, including commercial and industrial businesses, trade associations, environmental groups, homeowners associations, and educational organizations, among others.
 - 6.2.2.2.3 What are the types of public involvement activities included in your program. Where appropriate, consider the following types of pubic involvement activities:
 - 6.2.2.2.3.1 Citizen representatives on a storm water management panel
 - 6.2.2.2.3.2 Public hearings
 - 6.2.2.2.3.3 Working with citizen volunteers willing to educate others about the program
 - 6.2.2.2.3.4 Volunteer monitoring or stream clean-up activities

6.2.2.2.5 Who is responsible for the overall management and implementation of your storm water public involvement/participation program and, if different, who is responsible for each of the BMPs identified for this program.

6.2.2.2.6 How you will evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs.

6.2.3 Illicit Discharge Detection and Elimination

6.2.3.1 *Permit requirement.* You must:

6.2.3.1.1 Develop, implement and enforce a program to detect and eliminate illicit discharges (as defined in 40 CFR §122.26(b)(2)) into your small MS4;

6.2.3.1.2 Develop, if not already completed, a storm sewer system map, showing the location of all outfalls and the names and location of all waters of the United States that receive discharges from those outfalls;

6.2.3.1.3 To the extent allowable under State, Tribal or local law, effectively prohibit, through ordinance, or other regulatory mechanism, non-storm water discharges into your storm sewer system and implement appropriate enforcement procedures and actions;

6.2.3.1.4 Develop and implement a plan to detect and address non-storm water discharges, including illegal dumping, to your system;

6.2.3.1.5 Inform Dover Air Force Base residents and employees, businesses, and the general public who frequent the Base, of hazards associated with illegal discharges and improper disposal of waste; and

6.2.3.1.6 Address the following categories of non-storm water discharges or flows (i.e., illicit discharges) only if you identify them as significant contributors of pollutants to your small MS4: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR §35.2005(20)), uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water (discharges or flows from fire fighting activities are excluded from the effective prohibition against non-storm water and need only be addressed where they are identified as significant sources of pollutants to waters of the United States).

6.2.3.1.7 You may also develop a list of other similar occasional incidental non-storm water discharges (e.g. non-commercial or charity car washes, etc.) that will not be addressed as illicit discharges. These non-storm water discharges must not be reasonably expected (based on information available to the permittees) to be significant sources of pollutants to the Municipal Separate Storm Sewer System, because of either the nature of the discharges or conditions you have established for allowing these discharges to your MS4 (e.g., a charity car wash with appropriate controls on frequency, proximity to sensitive waterbodies, BMPs on the wash water, etc.). You must document in your SWMP any local controls or conditions placed on the discharges. You must include a provision prohibiting any individual non-storm water discharge that is determined to be contributing significant amounts of pollutants to your MS4.

6.2.3.2 *Implementation process.* You must document your rationale and implementation process for the storm water illicit discharge detection and elimination program. Your rationale statement must address both

your overall illicit discharge detection and elimination program and the individual BMPs, measurable goals, and responsible persons for your program. The rational statement must include the following information, at a minimum:

- 6.2.3.2.1 How you will (or have) develop(ed) a storm sewer map showing the location of all outfalls and the names and location of all receiving waters. Describe the sources of information you used for the maps, and how you plan to verify the outfall locations with field surveys. If already completed, describe how you developed this map. Also, describe how your map will be regularly updated.
- 6.2.3.2.2 The mechanism (ordinance or other regulatory mechanism) you will use to effectively prohibit illicit discharges into the MS4 and why you chose that mechanism. If you need to develop this mechanism, describe your plan and a schedule to do so. If your ordinance or regulatory mechanism is already developed, include a copy of the relevant sections with your program.
- 6.2.3.2.3 Your plan to ensure through appropriate enforcement procedures and actions that your illicit discharge ordinance (or other regulatory mechanism) is implemented.
- 6.2.3.2.4 Your plan to detect and address illicit discharges to your system, including discharges from illegal dumping and spills. Your plan must include dry weather field screening for non-storm water flows and field tests of selected chemical parameters as indicators of discharge sources. Your plan must also address on-site sewage disposal systems that flow into your storm drainage system. Your description must address the following, at a minimum:
 - 6.2.3.2.4.1 Procedures for locating priority areas which includes areas with higher likelihood of illicit connections (e.g., areas with older sanitary sewer lines, for example) or ambient sampling to locate impacted reaches.
 - 6.2.3.2.4.2 Procedures for tracing the source of an illicit discharge, including the specific techniques you will use to detect the location of the source.
 - 6.2.3.2.4.3 Procedures for removing the source of the illicit discharge
 - 6.2.3.2.4.4 Procedures for program evaluation and assessment.
- 6.2.3.2.5 How you plan to inform residents, employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste. Include in your description how this plan will coordinate with your public education minimum measure and your pollution prevention/good housekeeping minimum measure programs.
- 6.2.3.2.6 Who is responsible for overall management and implementation of your storm water illicit discharge detection and elimination program and, if different, who is responsible for each of the BMPs identified for this program.
- 6.2.3.2.7 How you will evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs.

6.2.4 Construction Site Storm Water Runoff Control

- 6.2.4.1 *Permit requirement.* You must develop, implement, and enforce a program to reduce magnitude of and pollutants contained in any storm water runoff to your small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of storm water discharges from construction activity disturbing less than one acre must be included in your program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. Your program must include the development and implementation of, at a minimum:
- 6.2.4.1.1 An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as programs to encourage such things as low impact development practices to maximize on-site infiltration of storm water and functional landscape to enhance habitat value. This ordinance or other regulatory mechanism must include sanctions to ensure compliance, to the extent allowable under State, Tribal, or local law;
 - 6.2.4.1.2 Requirements for construction site operators to implement appropriate erosion and sediment control best management practices, low impact development and habitat enhancement;
 - 6.2.4.1.3 Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;
 - 6.2.4.1.4 Procedures for site plan review which incorporate consideration of potential water quality impacts;
 - 6.2.4.1.5 Procedures for receipt and consideration of information submitted by the public; and
 - 6.2.4.1.6 Procedures for site inspection and enforcement of control measures.
- 6.2.4.2 *Implementation process.* You must document your rationale and implementation process for your construction site storm water control program. Your rationale statement must address both your overall construction site storm water control program and the individual BMPs, measurable goals, and responsible persons for your program. The rationale statement must include the following information, at a minimum:
- 6.2.4.2.1 The mechanism (ordinance or other regulatory mechanism) you will use to require erosion and sediment controls at construction sites and why you chose that mechanism. If you need to develop this mechanism, describe your plan and a schedule to do so. If your ordinance or regulatory mechanism is already developed, include a copy of the relevant sections with your storm water management program description.
 - 6.2.4.2.2 Your plan to ensure compliance with your erosion and sediment control regulatory mechanism, including the sanctions and enforcement mechanisms you will use to ensure compliance. Describe your procedures for when you will use certain sanctions. Possible sanctions include non-monetary penalties (such a stop work orders), fines, bonding requirements, and/or permit denials for non-compliance.
 - 6.2.4.2.3 Your requirements for construction site operators to implement appropriate erosion and sediment control BMPs and control waste at construction sites that may cause adverse impacts to water quality. Such waste includes discarded building materials, concrete truck washouts, chemicals, litter, and sanitary waste.
 - 6.2.4.2.4 Your procedures for site plan review, including the review of pre-construction site plans, which incorporate consider of potential water quality impacts. Describe your procedures and the rationale for how you will identify certain sites for site plan review, if not all plans are reviewed. Describe the estimated number and percentage of site that will have pre-construction site plans reviewed.

- 6.2.4.2.5 Your procedures for receipt and consideration of information submitted by the public. Consider coordinating this requirement with your public education program.
- 6.2.4.2.6 Your procedures for site inspection and enforcement of control measures, including how you will prioritize sites for inspection.
- 6.2.4.2.7 Who is responsible for overall management and implementation of your construction site storm water control program and, if different, who is responsible for each of the BMPs identified for this program.
- 6.2.4.2.8 Describe how you will evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs.

6.2.5 Post-Construction Storm Water Management in New Development and Redevelopment

6.2.5.1 *Permit requirement.* You must:

- 6.2.5.1.1 Develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into your small MS4. Your program must ensure that controls are in place that would prevent or minimize water quality impacts;
- 6.2.5.1.2 Develop and implement strategies which include a combination of structural and/or non-structural best management practices (BMPs) that maximize on site infiltration of storm water; and
- 6.2.5.1.3 Use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under State, Tribal or local law; and
- 6.2.5.1.4 Ensure adequate long-term operation and maintenance of BMPs.

6.2.5.2 *Implementation process.* You must document your rationale and implementation process for your post-construction storm water management program. Your rationale statement must address both your overall post-construction storm water management program and the individual BMPs, measurable goals, and responsible persons for your program. The rationale statement must include the following information, at a minimum:

- 6.2.5.2.1 Your program to address storm water runoff from new development and redevelopment projects. Include in this description any specific priority areas for this program.
- 6.2.5.2.2 How your program will be specifically tailored for your local community, minimize water quality impacts, and attempt to maintain pre-development runoff conditions.
- 6.2.5.2.3 Any non-structural BMPs in your program, including, as appropriate:
 - 6.2.5.2.3.1 Policies and ordinances that provide requirements and standards to direct growth to identified areas, protect sensitive areas such as wetlands and riparian areas, maintain and/or increase open space provide buffers along sensitive water bodies, minimize impervious surfaces, and minimize disturbance of soils and vegetation;
 - 6.2.5.2.3.2 Policies or ordinances that encourage infill development in higher density areas, and areas with existing storm sewer infrastructure;

- 6.2.5.2.3.3 Education programs for developers and the public about project designs that minimize water quality impacts; and
- 6.2.5.2.3.4 Other measures such as minimization of the percentage of impervious area after development, use of measures to minimize directly connected impervious areas, rain leader disconnection programs, and source control measures often thought of as good housekeeping, preventive maintenance and spill prevention.
- 6.2.5.2.4 Any structural BMPs in your program, including, as appropriate:
 - 6.2.5.2.4.1 Storage practices such as wet ponds and extended-detention outlet structures;
 - 6.2.5.2.4.2 Filtration practices such as grassed swales, bioretention cells, sand filters and filter strips; and
 - 6.2.5.2.4.3 Infiltration practices such as infiltration basins and infiltration trenches.
- 6.2.5.2.5 What are the mechanisms (ordinance or other regulatory mechanisms) you will use to address post-construction runoff from new developments and redevelopments and why did you chose that mechanism. If you need to develop a mechanism, describe your plan and a schedule to do so. If your ordinance or regulatory mechanism is already developed, include a copy of the relevant sections with your program.
- 6.2.5.2.6 How you will ensure the long-term operation and maintenance (O&M) of your selected BMPs. Options to help ensure that future O&M responsibilities are clearly identified include an agreement between you and another party such as the post-development landowners or regional authorities.
- 6.2.5.2.7 Who is responsible for overall management and implementation of your post-construction storm water management program and, if different, who is responsible for each of the BMPs identified for this program.
- 6.2.5.2.8 How you will evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs.

6.2.6 Pollution Prevention/Good Housekeeping for Municipal Operations

- 6.2.6.1 *Permit requirement.* You must:
 - 6.2.6.1.1 Develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations. This operation and maintenance program should be comprehensive but must include a section describing controls for storage and application of pesticides, fertilizers, and other toxic substances applied to public rights of way, parks, and the golf course, according to current practices and procedures and as described in the SWMP and Federal regulations.
 - 6.2.6.1.2 Using training materials that are available from EPA, your State, Tribe, or other organizations, your program must include employee training to prevent and reduce storm water pollution from activities such as park and open space maintenance including the on site golf course, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance.
- 6.2.6.2 *Implementation process.* You must document your rationale and implementation process for your pollution prevention/good housekeeping program for municipal operations. Your rationale statement

must address both your overall pollution prevention/good housekeeping program and the individual BMPs, measurable goals, and responsible persons for your program. The rationale statement must include the following information, at a minimum:

- 6.2.6.2.1 Your operation and maintenance program to prevent or reduce pollutant runoff from your municipal operations. Your program must specifically list the municipal operations that are impacted by this operation and maintenance program, including but not limited to the residential, commercial, and recreational (including the golf course) areas southwest of Highway 113. You must also include a list of industrial facilities you own or operate that this individual NPDES permit for discharges of storm water associated with industrial activity that ultimately discharge to your MS4.
- 6.2.6.2.2 Any government employee training program you will use to prevent and reduce storm water pollution from activities such as park and open space maintenance including the on site golf course, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance. Describe any existing, available materials you plan to use. Describe how this training program will be coordinated with the outreach programs developed for the public information minimum measure and the illicit discharge minimum measure.
- 6.2.6.2.3 Your program description must specifically address the following areas:
 - 6.2.6.2.3.1 Maintenance activities, maintenance schedules, and long-term inspection procedures for controls to reduce floatables and other pollutants to your MS4.
 - 6.2.6.2.3.2 Controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards including all above and below ground storage tanks, waste transfer stations, fleet or maintenance shops with outdoor storage areas, and salt/sand storage locations and snow disposal areas you operate.
 - 6.2.6.2.3.3 Procedures for the proper disposal of waste removed from your MS4 and your municipal operations, including dredge spoil, accumulated sediments, floatables, and other debris.
 - 6.2.6.2.3.4 Procedures to ensure that new flood management projects are assessed for impacts on water quality and existing projects are assessed for incorporation of additional water quality protection devices or practices.
- 6.2.6.2.4 Who is responsible for overall management and implementation of your pollution prevention/good housekeeping program and, if different, who is responsible for each of the BMPs identified for this program.
- 6.2.6.2.5 How you will evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs.

6.3 Reviewing and Updating Storm Water Management Programs

- 6.3.1 *Storm Water Management Program Review:* You must do an annual review of your Storm Water Management Program in conjunction with preparation of the annual report required under Part 7.3
- 6.3.2 *Storm Water Management Program Update:* You may change your Storm Water Management Program during the life of the permit in accordance with the following procedures:
 - 6.3.2.1 Changes adding (but not subtracting or replacing) components, controls, or requirements to the Storm Water Management Program may be made at any time upon written notification to the Permitting Authority.

- 6.3.2.2 Changes replacing an ineffective or unfeasible BMP specifically identified in the Storm Water Management Program with an alternate BMP may be requested at any time. Unless denied by the Permitting Authority, changes proposed in accordance with the criteria below shall be deemed approved and may be implemented 60 days from submittal of the request. If request is denied, the Permitting Authority will send you a written response giving a reason for the decision. Your modification requests must include the following:
- 6.3.2.2.1 An analysis of why the BMP is ineffective or infeasible (including cost prohibitive),
- 6.3.2.2.2 Expectations on the effectiveness of the replacement BMP, and
- 6.3.2.2.3 An analysis of why the replacement BMP is expected to achieve the goals of the BMP to be replaced.
- 6.3.2.3 Change requests or notifications must be made in writing and signed in accordance with Part 6.7.
- 6.3.3 *Storm Water Management Program Updates Required by the Permitting Authority:* The Permitting Authority may require changes to the Storm Water Management Program as needed to:
- 6.3.3.1 Address impacts on receiving water quality caused, or contributed to, by discharges from the Municipal Separate Storm Sewer System;
- 6.3.3.2 Include more stringent requirements necessary to comply with new Federal statutory or regulatory requirements; or
- 6.3.3.3 Include such other conditions deemed necessary by the Permitting Authority to comply with the goals and requirements of the Clean Water Act.
- 6.3.3.4 Changes requested by the Permitting Authority must be made in writing, set forth the time schedule for you to develop the changes, and offer you the opportunity to propose alternative program changes to meet the objective of the requested modification. All changes required by the Permitting Authority will be made in accordance with 40 CFR 124.5, 40 CFR 122.62, or as appropriate 40 CFR 122.63.
- 6.3.4 *Transfer of Ownership, Operational Authority, or Responsibility for Storm Water Management Program Implementation:* You must implement the Storm Water Management Program on all new areas added to your portion of the municipal separate storm sewer system (or for which you become responsible for implementation of storm water quality controls) as expeditiously as practicable, but not later than one year from addition of the new areas. Implementation may be accomplished in a phased manner to allow additional time for controls that cannot be implemented immediately.
- 6.3.4.1 Within 90 days of a transfer of ownership, operational authority, or responsibility for storm water management program implementation, you must have a plan for implementing your Storm Water Management Program on all affected areas. The plan may include schedules for implementation. Information on all new annexed areas and any resulting updates required to the Storm Water Management Program must be included in the annual report.

7 Small MS4 Monitoring, Record Keeping, and Reporting

7.1 Program Evaluation/Assessment Monitoring

- 7.1.1 Through out the life of the permit, you must evaluate program compliance, the appropriateness of identified best management practices, and progress toward achieving identified measurable goals described in the Storm Water Management Program. This program evaluation monitoring shall be conducted routinely and frequently enough to assess the effectiveness of each of the six (6) minimum control measures described in Section 6.0, and to provide the necessary reporting information required in the annual report described in Section 7.4 of this permit. Monitoring for the purpose of program evaluation may be qualitative and quantitative.
- 7.1.2 When you conduct monitoring at your small MS4, you are required to comply with the following:
- 7.1.2.1 *Representative monitoring.* Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- 7.1.2.2 *Test Procedures.* Any discharge or in-stream monitoring and analytical testing must be conducted according to test procedures approved under 40 CFR part 136.
- 7.1.3 Records of monitoring information shall include:
- 7.1.3.1 The date, exact place, and time of sampling or measurements;
- 7.1.3.2 The names(s) of the individual(s) who performed the sampling or measurements;
- 7.1.3.3 The date(s) analyses were performed;
- 7.1.3.4 The names of the individuals who performed the analyses;
- 7.1.3.5 The analytical techniques or methods used; and
- 7.1.3.6 The results of such analyses.
- 7.1.4 *Discharge Monitoring Report.* Any discharge or in-stream monitoring results must be reported on a Discharge Monitoring Report (DMR)
- 7.2 Small MS4 Screening Characterization Monitoring**
- A screening characterization of representative storm water discharges shall be conducted in the first two years of the permit cycle (following approval by the Permitting Authority of the Screening Characterization Monitoring Plan) to determine potential types and sources of pollutants, which may be present in the small MS4 storm water discharges. Three representative outfalls may be selected from outfalls 010 through 023 for the MS4 screening characterization monitoring. Levels of storm water pollution found during this screening shall be used to develop priority system for control of these pollutants. The SWMP may be revised following this two-year screening to include a plan for reducing these additional pollutants through the use of appropriate BMPs. The permit may be reopened and revised to incorporate additional monitoring requirements in accordance with Section 3.18 of this permit.
- 7.2.1 *Screening Characterization Monitoring Plan* The permittee will develop a Screening Characterization Monitoring Plan within the first six (6) months of permit issuance. The Screening Characterization Monitoring Plan will be submitted to EPA for review and approval. The final approved Screening Characterization Plan will be implemented for a period of 2 years following issuance of the plan.
- 7.2.2 *Monitoring* is to be conducted during 6 storm events per year of the 2 year screening period for a total of 12 storm events sampled. General information about each storm event shall be recorded in accordance with the requirement listed in Section 7.1.3 of this permit and also must include the following

1. Date and duration (in hours) of the storm event sampled
2. Rainfall measurements or estimates of the storm event (in inches) which generated the sampled runoff

7.2.3 *Discharge parameters* to be sampled, include parameters listed as causes of impairment in the Delaware Section 303(d) list of impaired waters for Pipe Elm Branch and Saint Jones River and parameters commonly found in municipal separate storm water discharges (for the MS4). These parameters include:

Parameters sampled from representative outfalls from MS4 (outfalls 010 – 023):

Bacteria (Fecal coliform)	Oil and grease
Nutrients (total phosphorous and total nitrogen)	Detergents or surfactants
Metals (total copper, lead, zinc, cadmium)	pH
Total Suspended Solids (TSS)	Biological Oxygen Demand (BOD5)

7.3 Small MS4 Record Keeping

7.3.1 You must retain records of all monitoring information, including, all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, copies of Discharge Monitoring Reports (DMRs), a copy of the NPDES permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report or application, or for the term of this permit, whichever is longer. This period may be extended by request of the Permitting Authority at any time.

7.3.2 You must submit your records to the Permitting Authority only when specifically asked to do so. You must retain a description of the Storm Water Management Program required by this permit (including a copy of the permit language) at a location accessible to the Permitting Authority. You must make your records, including the application and the description of the storm water management program, available to the public if requested to do so in writing.

7.4 Small MS4 Reporting

You must submit annual reports to the Permitting Authority by January of each year of the permit term beginning the second year after permit issuance (after finalization of the SWMP). The annual report must include:

- 7.4.1 The status of your compliance with permit conditions, an assessment of the appropriateness of the identified best management practices, progress towards achieving the statutory goal of reducing the discharge of pollutants to the MEP, and the measurable goals for each of the minimum control measures;
- 7.4.2 Results of information collected and analyzed, if any, during the reporting period, including monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP;
- 7.4.3 A summary of the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule); and
- 7.4.4 Proposed changes to your storm water management program, including changes to any BMPs or any identified measurable goals that apply to the program elements.

PART III SPECIAL CONDITIONS

Section B – Special Conditions for Storm Water Associated with Industrial Activities**8 Industrial Storm Water Discharges to Water Quality Impaired Waters**

- 8.1 *Applicability:* Pipe Elm Branch and Saint Jones River, two Waters of the US that receive storm water discharges from Dover Air Force Base, are listed on the state of Delaware 1998 section 303(d) list of impaired waters. Storm water associated with industrial activities at Dover Air Force Base discharge to both receiving streams. Pipe Elm Branch is listed for the following pollutants: bacteria, DO, and nutrients. Lower Saint Jones River is listed for the following pollutants: DO, nutrients, and PCBs. Upper Saint Jones River is listed for the following pollutants: bacteria, DO, nutrients, and PCBs.

Storm water discharges from the industrial activities at Dover Air Force Base covered under this permit (Hazardous Waste Treatment, Storage, or Disposal; Scrap Recycling and Waste Recycling Facilities, Air Transportation, and Landfills) may have reasonable potential to contain some of these pollutants of concern

- 8.2 *Water Quality Controls for Discharges to Impaired Waters Without a TMDL.* Your Storm Water Pollution Prevention Plan must include a section describing how your program will control the discharge of the pollutants of concern and ensure your discharges will not cause or contribute to instream exceedances of the water quality standards. This discussion must specifically identify measures and BMPs that will collectively control the discharge of the pollutants of concern.
- 8.3 *Consistency with Total Maximum Daily Load (TMDL) Allocations.* . At the time of issuance of this permit, no TMDLs have been developed and approved by EPA for Pipe Elm Branch and Saint Jones River. When a TMDL has been approved for any waterbody into which you discharge, you must, at the next permit issuance or as an addendum to the current permit as directed by the Permitting Authority:
- 8.3.1 Determine whether the TMDL includes a pollutant wasteload allocation (WLA) or other performance requirements specifically for storm water discharge from your industrial activities.
- 8.3.2 Determine whether the TMDL address a flow regime likely to occur during periods of storm water discharge.
- 8.3.3 After the determinations above have been made and you find that your industrial facilities must implement specific WLA provisions of the TMDL, you must revise your SWPPP consistent with the assumptions and requirements of any applicable WLAs in the TMDL. You must include a certification in the SWPPP regarding this consistency with the TMDL assumptions and requirements. Note that given the nature and variability of storm water discharges, BMPs are the most appropriate form of effluent limitations for most storm water discharges.
- 8.3.4 Document all control measures currently being implemented or planned to be implemented. Also include a schedule of implementation for all planned controls. Document the calculations or other evidence that shows that the WLA will be met.
- 8.3.5 Describe a monitoring program to determine whether the storm water controls are adequate to meet the WLA.

- 8.3.6 If the evaluation shows that additional or modified controls are necessary, describe the type and schedule for the control additions/revisions. Continue Parts 5.1.3.4-7 until two continuous monitoring cycles show that the WLAs are being met or that WQ standards are being met.

9.0 Facilities Eligible for “No Exposure” Exemption for Storm Water Permitting at Industrial Facilities

By filing a certification of “No Exposure” under 40 CFR 122.26 (g), you are automatically removed from permit coverage and no additional permit termination is required. A “No Exposure” certification may be filed if all industrial materials and activities within one of the industrial activity sectors covered under this permit are protected by storm water resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff. Industrial materials or activities include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, by-products, final products or waste products. A storm resistant shelter is not required for drums, barrels, tanks and similar containers that are tightly sealed, provided those containers are not deteriorated and do not leak and for adequately maintained vehicles used in material handling.

10.0 Sector Specific Requirement: Scrap Recycling and Waste Recycling Facilities. The types of activities that are included in this industrial activity are:

processing, reclaiming and wholesale distribution of scrap and waste materials such as ferrous and nonferrous metals, paper, plastic, cardboard, glass, and animal hides;

reclaiming and recycling liquid wastes such as used oil, antifreeze, mineral spirits and industrial solvents

- 10.1 *Limitations on Coverage: Prohibition of Non-Storm Water Discharges.* (See also Section 1.3) Not authorized by this permit: nonstorm water discharges from turnings containment areas. Discharges from containment areas in the absence of a storm event are prohibited unless covered by a separate NPDES permit.

- 10.2 *Storm Water Pollution Prevention Plan (SWPPP) Requirements.* In addition to the following requirements, you must also comply with the requirements listed in Section 12 of this permit. Implement and describe in your final SWPPP, which you submit to the Permitting Authority with in three (3) months after permit issuance, a program to address those items included in this section below that apply. The following are lists of BMP options, which, along with any functional equivalents, should be considered for implementation. Selection or deselection of a particular BMP or approach is up to the best professional judgment of the operator, as long as the objective of the requirement is met.

- 10.2.1 *Drainage Area Site Map.* Identify the locations of any of the following activities or sources which may be exposed to precipitation / surface runoff: scrap and waste material storage, outdoor scrap and waste processing equipment, and containment areas for turnings exposed to cutting fluids.

- 10.2.2 *Scrap and Waste Recycling Facilities (Non-Source Separated, Non-Liquid Recyclable Materials).* Requirements for facilities that receive, process and do wholesale distribution of non-liquid recyclable wastes (e.g., ferrous and nonferrous metals, plastics, glass, cardboard and paper). These facilities may receive both non recyclable and recyclable materials. This section is not intended for those facilities that only accept recyclables from primarily non-industrial and residential sources.

- 10.2.2.1 Inbound Recyclable and Waste Material Control Program. Minimize the chance of accepting materials that could be significant sources of pollutants by conducting inspections of inbound recyclables and waste materials. BMP options: a) provide information / education to suppliers of scrap and recyclable

- waste materials on draining and properly disposing of residual fluids (e.g., from vehicles and equipment engines, radiators and transmissions, oil filled transformers and individual containers or drums), prior to delivery to your facility; b) procedures to minimize the potential of any residual fluids from coming into contact with precipitation / runoff; c) procedures for accepting scrap lead-acid batteries (additional requirements for the handling, storage and disposal or recycling of batteries are contained in the scrap lead-acid battery program provisions in the NPDES Storm Water Multi-Sector General Permit for Industrial Activities, section N.5.1.6); d) training targeted for those personnel engaged in the inspection and acceptance of inbound recyclable materials. In addition, e) liquid wastes, including used oil, must be stored in materially compatible and non-leaking containers and disposed or recycled in accordance with RCRA.
- 10.2.2.2 Scrap and Waste Material Stockpiles / Storage (Outdoor). Minimize contact of storm water runoff with stockpiled materials, processed materials and non-recyclable wastes. BMP options: a) permanent or semi-permanent covers; b) to facilitate settling or filtering of pollutants: sediment traps, vegetated swales and strips, catch basin filters and sand filters; c) divert runoff away from storage areas via dikes, berms, containment trenches, culverts and surface grading; d) silt fencing; e) oil/water separators, sumps and dry absorbents for areas where potential sources of residual fluids are stockpiled (e.g., automobile engine storage areas).
- 10.2.2.3 Stockpiling of Turnings Exposed to Cutting Fluids (Outdoor). Minimize contact of surface runoff with residual cutting fluids. BMP options (use singularly or in combination): a) store all turnings exposed to cutting fluids under some form of permanent or semi-permanent cover. Storm water discharges from these areas are permitted provided the runoff is first treated by an oil/water separator or its equivalent. Identify procedures to collect, handle and dispose / recycle residual fluids which may be present; b) establish dedicated containment areas for all turnings that have been exposed to cutting fluids. Storm water runoff from these areas can be discharged provided: the containment areas are constructed of either concrete, asphalt or other equivalent types of impermeable material; there is a barrier around the perimeter of the containment areas (e.g., berms, curbing, elevated pads, etc.) to prevent contact with storm water run-on; there is a drainage collection system for runoff generated from containment areas; you have a schedule to maintain the oil/water separator (or its equivalent); and you identify procedures for properly disposing or recycling collected residual fluids.
- 10.2.2.4 Scrap and Waste Material Stockpiles / Storage (Covered or Indoor Storage). Minimize contact of residual liquids and particulate matter from materials stored indoors or under cover with surface runoff. BMP options: a) good housekeeping measures including the use of dry absorbent or wet vacuuming to contain or dispose / recycle residual liquids originating from recyclable containers; b) not allowing washwater from tipping floors or other processing areas to discharge to the storm sewer system; c) disconnect or seal off all floor drains connected to the storm sewer system.
- 10.2.2.5 Scrap and Recyclable Waste Processing Areas. Minimize surface runoff from coming in contact with scrap processing equipment. Pay attention to operations that generate visible amounts of particulate residue (e.g., shredding) to minimize the contact of accumulated particulate matter and residual fluids with runoff (i.e., through good housekeeping, preventive maintenance, etc.). BMP options: a) regularly inspect equipment for spills / leaks, and malfunctioning / worn / corroded parts or equipment; b) a preventive maintenance program for processing equipment; c) use of dry-absorbents or other cleanup practices to collect and dispose / recycle spilled / leaking fluids; e) on unattended hydraulic reservoirs over 150 gallons in capacity, install such protection devices as low-level alarms or other equivalent devices, or, alternatively, secondary containment that can hold the entire volume of the reservoir; f) containment or diversion structures such as dikes, berms, culverts, trenches, elevated concrete pads, grading to minimize contact of storm water runoff with outdoor processing equipment or stored materials; g) oil / water separators or sumps; h) permanent or semi-permanent covers in processing areas where there are residual fluids and grease; i) retention / detention ponds or basins;

sediment traps, vegetated swales or strips (for pollutant settling / filtration); j) catch basin filters or sand filters.

- 10.2.2.6 Scrap Lead-Acid Battery Program. Properly handle, store and dispose of scrap lead-acid batteries. BMP options: a) segregate scrap lead-acid batteries from other scrap materials; b) proper handling, storage and disposal of cracked or broken batteries; c) collect and dispose leaking lead-acid battery fluid; d) minimize / eliminate (if possible) exposure of scrap lead-acid batteries to precipitation or runoff; e) employee training for the management of scrap batteries.
- 10.2.2.7 Spill Prevention and Response Procedures. (See also Appendix B) Minimize storm water contamination at loading / unloading areas, and from equipment or container failures. BMP options: a) prevention and response measures for areas that are potential sources of fluid leaks / spills; b) immediate containment and clean up of spills / leaks. If malfunctioning equipment is responsible for the spill / leak, repairs should also be conducted as soon as possible; c) cleanup measures including the use of dry absorbents. If this method is employed, there should be an adequate supply of dry absorbent materials kept onsite and used absorbent must be properly disposed of; d) store drums containing liquids—especially oil and lubricants—either: indoors, in a bermed area, in overpack containers or spill pallets, or in other containment devices; e) install overfill prevention devices on fuel pumps or tanks; f) place drip pans or equivalent measures under leaking stationary equipment until the leak is repaired. The drip pans should be inspected for leaks and potential overflow and all liquids must be properly disposed of (as per RCRA); g) install alarms and / or pump shut off systems on outdoor equipment with hydraulic reservoirs exceeding 150 gallons in the event of a line break. Alternatively, a secondary containment system capable of holding the entire contents of the reservoir plus room for precipitation can be used.
- 10.2.2.8 Quarterly Inspection Program. (See also Section Appendix B) Inspect all designated areas of the facility and equipment identified in the plan quarterly.
- 10.2.2.9 Supplier Notification Program. As appropriate, notify major suppliers which scrap materials will not be accepted at the facility or are only accepted under certain conditions.
- 10.3 *Waste Recycling Facilities (Liquid Recyclable Materials).*
- 10.3.1 Waste Material Storage (Indoor). Minimize / eliminate contact between residual liquids from waste materials stored indoors and surface runoff. The plan may refer to applicable portions of other existing plans such as SPCC plans required under 40 CFR Part 112. BMP options: a) procedures for material handling (including labeling and marking); b) clean up spills / leaks with dry-absorbent materials or a wet vacuum system; c) appropriate containment structures (trenching, curbing, gutters, etc.); d) a drainage system, including appurtenances (e.g., pumps or ejectors, manually operated valves), to handle discharges from diked or bermed areas. Drainage should be discharged to an appropriate treatment facility, sanitary sewer system, or otherwise disposed of properly. These discharges may require coverage under a separate NPDES wastewater permit or industrial user permit under the pretreatment program.
- 10.3.2 Waste Material Storage (Outdoor). Minimize contact between stored residual liquids and precipitation or runoff. The plan may refer to applicable portions of other existing plans such as SPCC plans required under 40 CFR Part 112. Discharges of precipitation from containment areas containing used oil must also be in accordance with applicable sections of 40 CFR Part 112. BMP options: a) appropriate containment structures (e.g., dikes, berms, curbing, pits) to store the volume of the largest tank with sufficient extra capacity for precipitation; b) drainage control and other diversionary structures; d) for storage tanks, provide corrosion protection and / or leak detection systems; d) use dry-absorbent materials or a wet vacuum system to collect spills.

- 10.3.3 Trucks and Rail Car Waste Transfer Areas. Minimize pollutants in discharges from truck and rail car loading / unloading areas. Include measures to clean up minor spills / leaks resulting from the transfer of liquid wastes. BMP options: a) containment and diversionary structures to minimize contact with precipitation or runoff; b) use dry-clean up methods, wet vacuuming, roof coverings, or runoff controls.
- 10.3.4 Quarterly Inspections. (See also Appendix B) At a minimum, the inspections must also include all areas where waste is generated, received, stored, treated or disposed and that are exposed to either precipitation or storm water runoff.
- 10.4 *Recycling Facilities (Source Separated Materials).* The following identifies considerations for facilities that receive only source-separated recyclables, primarily from non-industrial and residential sources.
- 10.4.1 Inbound Recyclable Material Control. Minimize the chance of accepting non-recyclables (e.g., hazardous materials) which could be a significant source of pollutants by conducting inspections of inbound materials. BMP options: a) information / education measures to inform suppliers of recyclables which materials are acceptable and which are not; b) training drivers responsible for pickup of recycled material; c) clearly marking public drop-off containers regarding which materials can be accepted; d) reject non-recyclable wastes or household hazardous wastes at the source; e) procedures for handling and disposal of non-recyclable material.
- 10.4.2 Outdoor Storage. Minimize exposure of recyclables to precipitation and runoff. Use good housekeeping measures to prevent accumulation of particulate matter and fluids, particularly in high traffic areas. Other BMP options: a) provide totally-enclosed drop-off containers for the public; b) install a sump / pump with each container pit and treat or discharge collected fluids to a sanitary sewer system; c) provide dikes and curbs for secondary containment (e.g., around bales of recyclable waste paper); d) divert surface water runoff away from outside material storage areas; e) provide covers over containment bins, dumpsters, roll-off boxes; f) store the equivalent one day's volume of recyclable material indoors.
- 10.4.3 Indoor Storage and Material Processing. Minimize the release of pollutants from indoor storage and processing areas. BMP options: a) schedule routine good housekeeping measures for all storage and processing areas; b) prohibit tipping floor washwater from draining to the storm sewer system; c) provide employee training on pollution prevention practices.
- 10.4.4 *Vehicle and Equipment Maintenance.* BMP options for those areas where vehicle and equipment maintenance are occurring outdoors: a) prohibit vehicle and equipment washwater from discharging to the storm sewer system; b) minimize or eliminate outdoor maintenance areas whenever possible; c) establish spill prevention and clean-up procedures in fueling areas; d) avoid topping off fuel tanks; e) divert runoff from fueling areas; f) store lubricants and hydraulic fluids indoors; g) provide employee training on proper handling, storage of hydraulic fluids and lubricants.

11 **Sector Specific Requirement: Air Transportation**

The types of activities this industrial sector is engaged in are

- Air transportation, scheduled, and air courier;
- Air transportation, non-scheduled;

- Airports; flying fields, except those maintained by aviation clubs; and airport terminal services including: air traffic control, except government; aircraft storage at airports; aircraft upholstery repair; airfreight handling at airports; airport hangar rental; airport leasing, if operating airport; airport terminal services; and hangar operations
- Airport and aircraft service and maintenance including: aircraft cleaning and janitorial service; aircraft servicing / repairing, except on a factory basis; vehicle maintenance shops; material handling facilities; equipment clearing operations; and airport and aircraft deicing / anti-icing. Only those portions of the facility that are involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling and lubrication), equipment cleaning operations or deicing operations are addressed.

Note: “deicing” will generally be used to imply both deicing (removing frost, snow or ice) and anti-icing (preventing accumulation of frost, snow or ice) activities, unless specific mention is made regarding anti-icing and / or deicing activities.

- 11.1 *Limitations on coverage: Prohibition of Non-Storm Water Discharges.* (See also Part 1.2) Not covered by this permit: aircraft, ground vehicle, runway and equipment washwaters; and dry weather discharges of deicing chemicals. These discharges must be covered by a separate NPDES permit.
- 11.2 *Hazardous Substances or Oil.* (See also Part 3.16) Each individual permittee is required to report spills equal to or exceeding the reportable quantity (RQ) levels specified at 40 CFR 110, 117 and 302. If an airport authority is the sole permittee, then the sum total of all spills at the airport must be assessed against the RQ. If the airport authority is a co-permittee with other deicing operators at the airport, such as numerous different airlines, the assessed amount must be the summation of spills by each co-permittee. If separate, distinct individual permittees exist at the airport, then the amount spilled by each separate permittee must be the assessed amount for the RQ determination.
- 11.3 *Storm Water Pollution Prevention Plan (SWPPP) Requirements.* In addition to the following requirements, you must also comply with the requirements listed in Section 9 of this permit. If an airport’s tenant has a SWPPP for discharges from their own areas of the airport, that SWPPP must be integrated with the plan for the entire airport. Tenants of the airport facility include air passenger or cargo companies, fixed based operators and other parties who have contracts with the airport authority to conduct business operations on airport property and whose operations result in storm water discharges associated with industrial activity. Implement and describe in your final SWPPP, which you submit to the Permitting Authority within three (3) months after permit issuance, a program to address those items included in this section below that apply.
- 11.3.1 *Drainage Area Site Map.* (See also Appendix B) Identify where any of the following may be exposed to precipitation / surface runoff: aircraft and runway deicing operations; fueling stations; aircraft, ground vehicle and equipment maintenance / cleaning areas; storage areas for aircraft, ground vehicles and equipment awaiting maintenance.
- 11.3.2 *Potential Pollutant Sources.* (See also Appendix B) Include in your inventory of exposed materials a description of the potential pollutant sources from the following activities: aircraft, runway, ground vehicle and equipment maintenance and cleaning; aircraft and runway deicing operations (including apron and centralized aircraft deicing stations, runways, taxiways and ramps). If you use deicing chemicals, you must maintain a record of the types (including the Material Safety Data Sheets [MSDS]) used and the monthly quantities, either as measured or, in the absence of metering, as

estimated to the best of your knowledge. This includes all deicing chemicals, not just glycols and urea (e.g., potassium acetate), because large quantities of these other chemicals can still have an adverse impact on receiving waters. Tenants or other fixed-based operations that conduct deicing operations must provide the above information to the airport authority for inclusion in any comprehensive airport SWPPPs.

11.3.3 *Good Housekeeping Measures.*

11.3.3.1 Aircraft, Ground Vehicle and Equipment Maintenance Areas. Describe and implement measures that prevent or minimize the contamination of storm water runoff from all areas used for aircraft, ground vehicle and equipment maintenance (including the maintenance conducted on the terminal apron and in dedicated hangars). Consider the following practices (or their equivalents): performing maintenance activities indoors; maintaining an organized inventory of material used in the maintenance areas; draining all parts of fluids prior to disposal; preventing the practice of hosing down the apron or hanger floor; using dry cleanup methods; and collecting the storm water runoff from the maintenance area and providing treatment or recycling.

11.3.3.2 Aircraft, Ground Vehicle and Equipment Cleaning Areas. Clean equipment only in the areas identified in the SWPPP and site map and clearly demarcate these areas on the ground. Describe and implement measures that prevent or minimize the contamination of storm water runoff from cleaning areas.

11.3.3.3 Aircraft, Ground Vehicle and Equipment Storage Areas. Store all aircraft, ground vehicles and equipment awaiting maintenance in designated areas only. Consider the following BMPs (or their equivalents): storing aircraft and ground vehicles indoors; using drip pans for the collection of fluid leaks; and perimeter drains, dikes or berms surrounding the storage areas.

11.3.3.4 Material Storage Areas. Maintain the vessels of stored materials (e.g., used oils, hydraulic fluids, spent solvents, and waste aircraft fuel) in good condition, to prevent or minimize contamination of storm water. Also plainly label the vessels (e.g., “used oil,” “Contaminated Jet A,” etc.). Describe and implement measures that prevent or minimize contamination of precipitation / runoff from these areas. Consider the following BMPs (or their equivalents): storing materials indoors; storing waste materials in a centralized location; and installing berms / dikes around storage areas.

11.3.3.5 Airport Fuel System and Fueling Areas. Describe and implement measures that prevent or minimize the discharge of fuel to the storm sewer / surface waters resulting from fuel servicing activities or other operations conducted in support of the airport fuel system. Consider the following BMPs (or their equivalents): implementing spill and overflow practices (e.g., placing absorptive materials beneath aircraft during fueling operations); using dry cleanup methods; and collecting storm water runoff.

11.3.3.6 Source Reduction. Consider alternatives to the use of urea and glycol-based deicing chemicals to reduce the aggregate amount of deicing chemicals used and / or lessen the environmental impact. Chemical options to replace ethylene glycol, propylene glycol and urea include: potassium acetate; magnesium acetate; calcium acetate; anhydrous sodium acetate.

11.3.3.6.1 Runway Deicing Operation: Evaluate, at a minimum, whether over-application of deicing chemicals occurs by analyzing application rates and adjusting as necessary, consistent with considerations of flight safety. Also consider these BMP options (or their equivalents): metered application of chemicals; pre-wetting dry chemical constituents prior to application; installing a runway ice detection system; implementing anti-icing operations as a preventive measure against ice buildup.

11.3.3.6.2 Aircraft Deicing Operations: As in Part 8.5.3.6.1, determine whether excessive application of deicing

chemicals occurs and adjust as necessary, consistent with considerations of flight safety. EPA intends for this evaluation to be carried out by the personnel most familiar with the particular aircraft and flight operations in question (vice an outside entity such as the airport authority). Consider using alternative deicing / anti-icing agents as well as containment measures for all applied chemicals. Also consider these BMP options (or their equivalents) for reducing deicing fluid use: forced-air deicing systems, computer-controlled fixed-gantry systems, infrared technology, hot water, varying glycol content to air temperature, enclosed-basket deicing trucks, mechanical methods, solar radiation, hangar storage, aircraft covers, thermal blankets for MD-80s and DC-9s. Also consider using ice-detection systems and airport traffic flow strategies and departure slot allocation systems.

- 11.3.3.7 **Management of Runoff.** Where deicing operations occur, describe and implement a program to control or manage contaminated runoff to reduce the amount of pollutants being discharged from the site. Consider these BMP options (or their equivalents): a dedicated deicing facility with a runoff collection / recovery system; using vacuum / collection trucks; storing contaminated storm water / deicing fluids in tanks and releasing controlled amounts to a publicly owned treatment works; collecting contaminated runoff in a wet pond for biochemical decomposition (be aware of attracting wildlife that may prove hazardous to flight operations); and directing runoff into vegetative swales or other infiltration measures. Also consider recovering deicing materials when these materials are applied during non-precipitation events (e.g., covering storm sewer inlets, using booms, installing absorptive interceptors in the drains, etc.) to prevent these materials from later becoming a source of storm water contamination. Used deicing fluid should be recycled whenever possible.
- 11.3.4 **Inspections.** (See also Appendix B) Specify the frequency of inspections in your SWPPP. At a minimum they must be conducted monthly during the deicing season (e.g., October through April for most mid-latitude airports). If your facility needs to deice before or after this period, expand the monthly inspections to include all months during which deicing chemicals may be used. Also, if significantly or deleteriously large quantities of deicing chemicals are being spilled or discharged, or if water quality impacts have been reported, increase the frequency of your inspections to weekly until such time as the chemical spills / discharges or impacts are reduced to acceptable levels. The Permitting Authority may specifically require you to increase inspections and SWPPP reevaluations as necessary.
- 11.3.5 **Comprehensive Site Compliance Evaluation.** (See also Appendix B) Using only qualified personnel, conduct your annual site compliance evaluations during periods of actual deicing operations, if possible. If not practicable during active deicing or the weather is too inclement, conduct the evaluations when deicing operations are likely to occur and the materials and equipment for deicing are in place.

12.0 Industrial Storm Water Pollution Prevention Plans

- 12.1 You must prepare a Storm Water Pollution Prevention Plan (SWPPP) for your facility before submitting a permit or permit renewal application. Your SWPPP must be prepared in accordance with good engineering practices, in accordance with the industrial sector specific requirements described in Sections 10 and 11 of this permit and with the following discussion. In general, your SWPPP must:
- 12.1.1 Identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges from your facility;
- 12.1.2 Describe and ensure implementation of practices which you will use to reduce the pollutants in storm water discharges from the facility, and;
- 12.1.3 Assure compliance with the terms and conditions of this permit.

12.2 Maintenance

All BMPs you identify in your SWPPP must be maintained in effective operating condition. If site inspections identify BMPs that are not operating effectively, maintenance must be performed before the next anticipated storm event, or as necessary to maintain the continued effectiveness of storm water controls. If maintenance prior to the next anticipated storm event is impracticable, maintenance must be scheduled and accomplished as soon as practicable. In the case of non-structural BMPs, the effectiveness of the BMP must be maintained by appropriate means (e.g., spill response supplies available and personnel trained, etc.).

12.3 Applicable State, Tribal or Local Plans

Your SWPPP must be consistent (and updated as necessary to remain consistent) with applicable State, Tribal and/or local storm water, waste disposal, sanitary sewer or septic system regulations to the extent these apply to your facility and are more stringent than the requirements of this permit.

12.4 Comprehensive Site Compliance Evaluation

- 12.4.1 *Frequency and Inspectors.* You must conduct facility inspections at least once a year. The inspections must be done by qualified personnel provided by you. The qualified personnel you use may be either your own employees or outside consultants that you have hired, provided they are knowledgeable and possess the skills to assess conditions at your facility that could impact storm water quality and assess the effectiveness of the BMPs you have chosen to use to control the quality of your storm water discharges. If you decide to conduct more frequent inspections, your SWPPP must specify the frequency of inspections.
- 12.4.2 *Scope of the Compliance Evaluation.* Your inspections must include all areas where industrial materials or activities are exposed to storm water, as identified in Section 5 of Appendix B, and areas where spills and leaks have occurred within the past 3 years. Inspectors should look for: a) industrial materials, residue or trash on the ground that could contaminate or be washed away in storm water; b) leaks or spills from industrial equipment, drums, barrels, tanks or similar containers; c) offsite tracking of industrial materials or sediment where vehicles enter or exit the site; d) tracking or blowing of raw, final, or waste materials from areas of no exposure to exposed areas and e) for evidence of, or the potential for, pollutants entering the drainage system. Results of both visual and any analytical monitoring done during the year must be taken into consideration during the evaluation. Storm water BMPs identified in your SWPPP must be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they must be inspected to see whether BMPs are effective in preventing significant impacts to receiving waters. Where discharge locations are inaccessible, nearby downstream locations must be inspected if possible.
- 12.4.3 *Follow-up Actions.* Based on the results of the inspection, you must modify your SWPPP as necessary (e.g., show additional controls on map required by Section 4 of Appendix B; revise description of controls required by Section 8 of Appendix B to include additional or modified BMPs designed to correct problems identified. You must complete revisions to the SWPPP within 14 calendar days following the inspection. If existing BMPs need to be modified or if additional BMPs are necessary, implementation must be completed before the next anticipated storm event, if practicable, but not more than twelve (12) weeks after completion of the comprehensive site evaluation.
- 12.4.4 *Compliance Evaluation Report.* You must insure a report summarizing the scope of the inspection, name(s) of personnel making the inspection, the date(s) of the inspection, and major observations

relating to the implementation of the SWPPP is completed and retained as part of the SWPPP for at least three years from the date permit coverage expires or is terminated. Major observations should include: the location(s) of discharges of pollutants from the site; location(s) of BMPs that need to be maintained; location(s) of BMPs that failed to operate as designed or proved inadequate for a particular location; and location(s) where additional BMPs are needed that did not exist at the time of inspection. You must retain a record of actions taken in accordance with Section 10.2 of this permit as part of the Storm Water Pollution Prevention Plan for at least three years from the date that permit coverage expires or is terminated. The inspection reports must identify any incidents of non-compliance. Where an inspection report does not identify any incidents of non-compliance, the report must contain a certification that the facility is in compliance with the Storm Water Pollution Prevention Plan and this permit. Both the inspection report and any reports of follow-up actions must be signed in accordance with Section 3.6 of this permit.

- 12.4.5 *Credit As a Routine Facility Inspection.* Where compliance evaluation schedules overlap with inspections required under Section 8.2.1.5 of Appendix B (Facility Routine Inspection), your annual compliance evaluation may also be used as one of the facility routine inspections.

12.5 Maintaining Updated SWPPP

You must amend the Storm Water Pollution Prevention Plan whenever:

- 12.5.1 there is a change in design, construction, operation, or maintenance at your facility which has a significant effect on the discharge, or potential for discharge, of pollutants from your facility;
- 12.5.2 during inspections, monitoring, or investigations by you or by local, State, Tribal or Federal officials it is determined the SWPPP is ineffective in eliminating or significantly minimizing pollutants from sources identified under Section 5 of Appendix B, or is otherwise not achieving the general objectives of controlling pollutants in discharges from your facility.

12.6 Signature, Plan Review and Making Plans Available

- 12.6.1 You must sign your SWPPP in accordance with Section 3.6, and retain the plan on-site at the facility covered by this permit (see Part 8 for records retention requirements).
- 12.6.2 You must keep a copy of the SWPPP on-site or locally available to the Permitting Authority for review at the time of an on-site inspection. You must make your SWPPP available upon request to the Permitting Authority, a State, Tribal or local agency approving storm water management plans, or the operator of a municipal separate storm sewer receiving discharge from the site. Also, in the interest of the public's right to know, you are encouraged to provide a copy of your SWPPP to the public if requested in writing to do so.
- 12.6.3 The Permitting Authority may notify you at any time that your SWPPP does not meet one or more of the minimum requirements of this permit. The notification will identify provisions of this permit which are not being met, as well as the required modifications. Within thirty (30) calendar days of receipt of such notification, you must make the required changes to the SWPPP and submit to the Permitting Authority a written certification that the requested changes have been made.
- 12.6.4 You must make the SWPPP available to the USFWS or NMFS upon request.

13 Storm Water Associated with Industrial Activities Monitoring, Record keeping and Reporting**13.1 Monitoring**

There are several categories of monitoring requirements including visual monitoring, benchmark monitoring, and screening characterization monitoring that your facility is subject to under this permit. The monitoring requirements applicable to your facility were developed based on a number of factors, including: 1) the types of industrial activities generating storm water runoff from your facility, and 2) the analogous sections of the NPDES Storm Water Multi-Sector General Permit for Industrial Activities.

Sector-specific monitoring requirements and limitations are applied discharge by discharge at facilities with co-located (in close proximity to each other) activities. Where storm water from the co-located activities are co-mingled, the monitoring requirements and limitations are additive. Where more than benchmark concentration for a specific parameter applies to a discharge, compliance with the more restrictive concentration should be used as a guide.

13.1.1 Types of Monitoring Requirements and Limitations**13.1.1.1 *Quarterly Visual Monitoring***

The requirements and procedures for quarterly visual monitoring are applicable to all facilities covered under this permit, regardless of your facility's sector of industrial activity.

13.1.1.1.1 You must perform and document a quarterly visual examination of a storm water discharge associated with industrial activity from each outfall, except discharges exempted below. The visual examination must be made during daylight hours (e.g., normal working hours). If no storm event resulted in runoff from the facility during a monitoring quarter, you are excused from visual monitoring for that quarter provided you document in your monitoring records that no runoff occurred. You must sign and certify the documentation in accordance with Section 3.6.

13.1.1.1.2 Your visual examinations must be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snowmelt begins discharging from your facility. The examination must document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The examination must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples must be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The 72-hour storm interval is waived when the preceding measurable storm did not yield a measurable discharge, or if you are able to document that less than a 72-hour interval is representative for local storm events during the sampling period. Where practicable, the same individual should carry out the collection and examination of discharges for the entire permit term. If no qualifying storm event resulted in runoff from the facility during a monitoring quarter, you are excused from visual monitoring for that quarter provided you document in your monitoring records that no qualifying storm event occurred that resulted in storm water runoff during that quarter. You must sign and certify the documentation in accordance with Section 3.6.

13.1.1.1.3 You must maintain your visual examination reports onsite with the Storm Water Pollution Prevention Plan. The report must include the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen,

and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

Inactive and Unstaffed Sites: When you are unable to conduct visual storm water examinations at an inactive and unstaffed site, you may exercise a waiver of the monitoring requirement as long as the facility remains inactive and unstaffed. If you exercise this waiver, you must maintain a certification with the Storm Water Pollution Prevention Plan stating that the site is inactive and unstaffed and that performing visual examinations during a qualifying event is not feasible. You must sign and certify the waiver in accordance with Section 3.6.

13.1.1.2 *Benchmark Monitoring of Discharges Associated With Specific Industrial Activities*

Table 13-1 identifies the specific industrial sectors subject to the Benchmark Monitoring requirements of this permit and includes specifically, the industry-specific pollutants of concern and Benchmark Monitoring Concentrations. These concentrations are intended as guides and were obtained from the NPDES Storm Water Multi-Sector General Permit for Industrial Activities

The results of benchmark monitoring are primarily for your use to determine the overall effectiveness of your SWPPP in controlling the discharge of pollutants to receiving waters. Benchmark values, included in Table 13-1, are not viewed as effluent limitations. An exceedance of a benchmark value does not, in and of itself, constitute a violation of this permit. While exceedance of a benchmark value does not automatically indicate that violation of a water quality standard has occurred, it does signal that modifications to the SWPPP may be necessary. In addition, exceedance of benchmark values may identify facilities that would be more appropriately covered under an alternative individual permit where more specific pollution prevention controls could be required.

Table 13-1. Industry Sectors/Sub-Sectors Subject to Benchmark Monitoring

Table 13.1.1 SECTOR-SPECIFIC NUMERIC LIMITATIONS AND BENCHMARK MONITORING		
Outfalls 002, 003, 004, 005, 006, 007, 008: Storm Water discharge from Air Transportation Activities		
Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Cutoff Concentration¹
Facilities at airports that use more than 100,000 gallons of glycol-based deicing/anti-icing chemicals and/or 100 tons or more of urea on an average annual basis: monitor ONLY those outfalls from the airport facility that collect runoff from areas where deicing/anti-icing activities occur	Biochemical Oxygen Demand (BOD ₅)	30 mg/L
	Chemical Oxygen Demand (COD)	120.0 mg/L
	Ammonia	19 mg/L
	pH	6.0 to 9 s.u.

¹ Monitor once/quarter April through October and once/month November through March.

Table 13-1. Industry Sectors/Sub-Sectors Subject to Benchmark Monitoring

Table 13.1.2 SECTOR-SPECIFIC BENCHMARK MONITORING		
Out fall 003: Storm Water Discharges from Scrap Recycling and Waste Recycling Facilities		
Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Cutoff Concentration
Scrap Recycling Facility (SIC 5093)	Chemical Oxygen Demand (COD)	120 mg/L
	Total Suspended Solids (TSS)	100 mg/L
	Total Recoverable Aluminum	0.75 mg/L
	Total Recoverable Copper	0.0636 mg/L
	Total Recoverable Iron	1.0 mg/L
	Total Recoverable Lead	0.0816 mg/L
	Total Recoverable Zinc	0.117 mg/L

13.1.1.2.1 *Inactive and Unstaffed Sites.* If you are unable to conduct benchmark monitoring at an inactive and unstaffed site, you may exercise a waiver of the monitoring requirement as long as the facility remains inactive and unstaffed. If you exercise this waiver, you must maintain a certification with your Storm Water Pollution Prevention Plan stating that the site is inactive and unstaffed and that performing benchmark monitoring during a qualifying storm event is not feasible. You must sign and certify the waiver in accordance with Part 13.3.

13.1.1.3 *Screening Characterization Monitoring*

A screening characterization of representative storm water discharges shall be conducted in the first two years of the permit cycle (following approval by the Permitting Authority of the Screening Characterization Monitoring Plan) to determine potential types and sources of pollutants, which may be present in storm water discharges from industrial areas of the Base in addition to those pollutant parameters listed in Table 13.1. Three representative outfalls may be selected from outfalls 002 through 009 for the industrial storm water screening characterization monitoring. Levels of storm water pollution found during this screening shall be used to develop priority system for control of these pollutants. The SWPPP will be revised following this two year screening to include a plan for reducing these additional pollutants. The permit may be reopened and revised to incorporate additional monitoring requirements in accordance with Section 3.18 of this permit.

13.1.1.3.1 *Screening Characterization Monitoring Plan* The permittee will develop a Screening Characterization Monitoring Plan within the first six (6) months of permit issuance. The Screening Characterization Monitoring Plan will be submitted to EPA for review and approval. The final approved Screening Characterization Plan will be implemented for a period of 2 years following issuance of the plan.

13.1.1.3.2 *Monitoring* is to be conducted during 6 storm events per year of the 2 year screening period for a total of 12 storm events sampled. General information about each storm event shall be recorded in

accordance with the requirement listed in Section 7.1.3 of this permit and also must include the following

1. Date and duration (in hours) of the storm event sampled
2. Rainfall measurements or estimates of the storm event (in inches) which generated the sampled runoff
3. Description of the sample location and sample collection and testing method

- 13.1.1.3.3 *Discharge parameters* to be sampled, include parameters listed as causes of impairment in the Delaware Section 303(d) list of impaired waters for Pipe Elm Branch and Saint Jones River and parameters listed in CFR 122.26 (c)(1)(i) (E) for industrial storm water. These parameters include:

Parameters sampled from representative outfalls from industrial areas (outfalls 002 – 009):

Flow	TSS
Oil and grease	total phosphorous
PH	total Kjeldahl nitrogen
BOD5	nitrate + nitrite nitrogen
COD	fecal coliform

13.1.2 Monitoring Instructions

- 13.1.2.1 *Monitoring Periods.* You are required to conduct monitoring on quarterly basis, except for storm water discharges from Air Transportation activities (Outfall 003) These outfalls must be sampled 1/month from November through March and quarterly from April through October.

- 13.1.2.2 *Collection and Analysis of Samples*

You must assess your sampling requirements on an outfall by outfall basis. You must collect and analyze your samples in accordance with the requirements of this permit.

- 13.1.2.2.1 *When and How to Sample.* Take a minimum of one grab sample from the discharge associated with industrial activity resulting from a storm event with at least 0.1 inch of precipitation (defined as a “measurable” event), providing the interval from the preceding measurable storm is at least 72 hours. The 72-hour storm interval is waived when the preceding measurable storm did not yield a measurable discharge, or if you are able to document that less than a 72-hour interval is representative for local storm events during the sampling period.

Take the grab sample during the first 30 minutes of the discharge. If it is not practicable to take the sample during the first 30 minutes, sample during the first hour of discharge and describe why a grab sample during the first 30 minutes was impracticable. Submit this information on or with the discharge monitoring report (see Sections 7.3 and 13.3). If the sampled discharge commingles with process or non-process water, attempt to sample the storm water discharge before it mixes with the non-storm water.

To get help with monitoring, consult the *Guidance Manual for the Monitoring and Reporting Requirements of the NPDES Storm Water Multi-Sector General Permit* which can be down loaded from the EPA Web Site at www.epa.gov/OWM/sw/industry/index.htm. It can also be ordered from the Office of Water Resource Center by calling 202-260-7786.

- 13.1.2.3 *Storm Event Data.*

Along with the results of your monitoring, you must provide the date and duration (in hours) of the

storm event(s) samples; rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff; the duration between the storm event samples and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge samples.

13.1.2.4 *Representative Outfalls - Essential Identical Discharges.*

If your facility has two (2) or more outfalls that you believe discharge substantially identical effluents, based on similarities of the industrial activities, significant materials or storm water management practices occurring within the outfalls' drainage areas, you may test the effluent of just one of the outfalls and report that the quantitative data also applies to the substantially identical outfall(s). For this to be permissible, you must describe in the Storm Water Pollution Prevention Plan and include in the Discharge Monitoring Report the following: locations of the outfalls; why the outfalls are expected to discharge substantially identical effluents; estimates of the size of the drainage area (in square feet) for each of the outfalls; and an estimate of the runoff coefficient of the drainage areas (low: under 40 percent; medium: 40 to 65 percent; high: above 65 percent). Note: Page 107 of the *NPDES Storm Water Sampling Guidance Document* (EPA 800/B-92-001) lists criteria for substantially identical outfalls (available on EPA's web site at <http://www.epa.gov/owm/sw/industry/>). (Note that Dover Air Force base followed this procedure and Outfall 003 has been selected as the representative outfall for discharges associated with Air transportation and Scrap Recycling)

13.1.3 **General Monitoring Waivers**

Unless specifically stated otherwise, the following waivers may be applied to any monitoring required under this permit.

13.1.3.1 *Adverse Climatic Conditions Waiver*

When adverse weather conditions prevent the collection of samples, take a substitute sample during a qualifying storm event in the next monitoring period, or four samples per monitoring year when weather conditions do not allow for samples to be spaced evenly during the year. Adverse conditions (i.e., those which are dangerous or create inaccessibility for personnel) may include such things as local flooding, high winds, electrical storms, or situations which otherwise make sampling impracticable such as drought or extended frozen conditions.

13.1.3.2 *Alternative Certification of "Not Present or No Exposure".* You are not subject to the analytical monitoring requirements of Part 13.1.2 provided you make a certification for a given outfall, on a pollutant-by-pollutant basis in lieu of monitoring required under Part 13.1.2, that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, or significant materials from past industrial activity that are located in areas of the facility within the drainage area of the outfall are not presently exposed to storm water and are not expected to be exposed to storm water for the certification period.

13.1.4 **Monitoring Required by the Permitting Authority**

The Permitting Authority may provide written notice requiring discharge sampling for a specific monitoring frequency for specific parameters. Any such notice will briefly state the reasons for the monitoring, parameters to be monitored, frequency and period of monitoring, sample types, and reporting requirements.

13.2 **Record keeping**

13.2.1 Documents.

13.2.1.1 You must retain copies of Storm Water Pollution Prevention Plans and all reports and certifications required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date that the facility's coverage under this permit expires or is terminated. This period may be extended by request of the Permitting Authority at any time.

13.2.1.2 *Records Contents.* Records of monitoring information must include:

- The date, exact place, and time of sampling or measurements;
- The date(s) analyses were performed;
- The time(s) analyses were initiated;
- The initials or name(s) of the individual(s) who performed the analyses;
- References and written procedures, when available, for the analytical techniques or methods used; and
- The results of such analyses, including the bench sheets, instrument readouts, computer disks or tapes, etc., used to determine these results.

13.2.2 Accessibility.

You must retain a copy of the Storm Water Pollution Prevention Plan required by this permit (including a copy of the permit language) at the facility (or other local location accessible to the Permitting Authority, a State, Tribal or Territorial agency with jurisdiction over water quality protection; local government officials; or the operator of a municipal separate storm sewer receiving discharges from the site) from the date of permit coverage to the date of permit coverage ceases. You must make a copy of your Storm Water Pollution Prevention Plan available to the public if requested to do so in writing.

13.2.3 Addresses.

All written correspondence concerning covered under this permit and directed to the EPA, including the submittal of individual permit applications, must be sent to the address of the appropriate EPA Regional Office listed below:

Storm Water Coordinator (3WP13)
USEPA
1650 Arch Street
Philadelphia, PA 19103

13.3 Reporting Monitoring Results**13.3.1 Reporting Results of Monitoring**

Depending on the types of monitoring required (visual inspections or benchmark level monitoring), you may have to submit the results of your monitoring or you may only have to keep the results with your Storm Water Pollution Prevention Plan. You must follow the reporting requirements and deadlines in Table 13-2 that apply to the types of monitoring that apply to your various industrial activities.

You must submit analytical monitoring results obtained from each outfall associated with industrial activity on a Discharge Monitoring Report (DMR) form (one form must be submitted for each storm event sampled). A DMR form is provided as an attachment to this permit. A copy of the DMR is also available on the Internet at www.epa.gov/own/sw/permits-and-forms/index.htm. The signed DMR must be sent to:

DMR (3WP31)
USEPA
1650 Arch Street
Philadelphia, PA 19103

NOTE: If EPA notifies dischargers (either directly, by public notice or by making information available on the Internet) of other DMR form options that become available at a later date (e.g., electronic submission of forms), you may take advantage of those options to satisfy the DMR use and submission requirements of this Section.

Table 13-2 - DMR / ALTERNATIVE CERTIFICATION SUBMISSION DEADLINES	
Type of Monitoring	Reporting Deadline (Postmark)
Visual Monitoring	Retain results with SWPPP - do not submit unless requested to do so by Permitting Authority
Benchmark Monitoring	Submit results by the 28 th day of the month following the monitoring period
Screening Characterization Monitoring	Submit results following the two (2) year screening characterization period

13.3.2 Miscellaneous Reports.

You must submit any other reports required by this permit to the Permitting Authority of the NPDES program at the address of the Region III Regional Office.

14 BOD Reduction Plan For Industrial Storm Water Discharges

- 14.1 During the first 12 months of this permit, the permittee shall collect BOD monitoring data as provided in Section 13.1 of this permit. This data shall be used to evaluate the permittee's progress in meeting the Sector Specific Benchmark Monitoring values given in Table 13.1 of this permit (BOD = 30 mg/l). If this data shows that the permittee is not meeting this BOD benchmark level, the permittee shall propose a plan to reduce the facility's BOD concentration and add this plan to the SWPPP. The permittee shall implement the BOD reduction plan and continue monitoring to determine goals of the plan are achieved.

15 **Airplane and Runway Deicing Product Reduction Plan**

- 15.1 *Deicing Product Usage.* The permittee shall record daily usage volumes and application locations of deicing fluids. The following information shall be tabulated and submitted with the Discharge Monitoring Reports:
- 15.1.1 Runway deicing/anti-icing materials used in gallons by date
- 15.1.2 Deicing fluids applied by each airline by date including the location where deicing took place and the approximate proportions of deicing fluid applied in each area.
- 15.2 *Immediate implementation of low- tech BMPs.* The permittee shall develop a plan and implement minimum technology best management practices which will minimize the potential for pollutants to come in contact with storm water. Also, the use of deicing materials and their application shall be evaluated and procedures implemented which will minimize the amount of deicing material that is discharged to local waterways.
- 15.3 *Development of Long Term Control Plan for Deicing Material Control.* The permittee shall develop a long term control plan and schedule (for review and approval by the Permitting Authority) which will describe the further reduction of the discharge of deicing materials and the potential for the elimination of the discharge of deicing materials from this facility into the local receiving waterbodies. The permittee will evaluate the costs, environmental benefits and feasibility of the implementation of various BMP alternatives. The permittee shall implement applicable structural BMPs, based upon the long term control plan, such as detention of spent deicing materials, containment of spent deicing materials, recycling, treatment, and/or disposal of spent deicing materials to the sanitary sewer system. The performance of the BMPs shall be monitored and revisions made to the Long Term Control Plan as necessary to ensure the storm water discharge associated with deicing activities does not cause or contribute to a violation of water quality standards.
- 15.4 *Schedule.* The following schedule for developing the low tech and long term control plan shall be as follows.
- | | |
|--|-----------------|
| Submit Low Tech BMP Plan | PID +6 months |
| Commence Implementation of Low Tech BMP Plan | PID + 7 months |
| Submit Long Term Control Plan | PID + 18 months |
| Begin to Implement Long Term Control Plan | PID + 24 months |
| Fully Implement Long Term Control Plan | PID + 48 months |

Note: PID means permit issuance date

APPENDIX A

General Schedule of Deliverables

Final SWPPP which includes

 Industry Specific Requirements outlined in Sections 8, 10

Screening Characterization Monitoring Plan

Airplane and Runway Deicing Product Reduction Plan

BOD Reduction Plan for Industrial Storm Water Discharges

Final SWMP, which includes

 requirements outlined in Section 6.0 PID + 1 year

Screening Characterization Monitoring results

Annual Reports in support of SWMP

DMR Forms for Benchmark monitoring of industrial storm water

PID + 6 months

PID + 6 months

PID + 1 year

PID + 1 year

PID + 2 years

PID + Jan each yr beginning
second yr after PID

quarterly on 28th of each
mo monthly -outfall 003

November through March

Note: PID= permit issuance date